

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE**

SHURE INCORPORATED, AND
SHURE ACQUISITION HOLDINGS, INC.,

Plaintiffs,

v.

CLEARONE, INC.,

Defendant.

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No. 1:19-cv-01343(RGA)(CJB)



PUBLIC VERSION FILED: July 14, 2020

JOINT CLAIM CONSTRUCTION BRIEF

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5	File Wrapper of U.S. Design Patent No. D865,723
6	Declaration of Paul Hatch in Support of Plaintiffs' Opening Claim Construction Brief
7	Images of Sennheiser's TC1 and TC2
8	ClearOne's Supplemental Objections and Responses to Shure's First Set of Interrogatories (Nos. 1-12) (HIGHLY CONFIDENTIAL – ATTORNEYS' EYES ONLY)
9	2020-05-20 Declaration of Paul Waadevig
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15	U.S. Pat. No. 9,813,806
16	U.S. Pat. Pub. No. 2012/0294472
17	U.S. Pat. No. 6,944,312
18	Declaration of David Cerra dated October 22, 2018, as filed in Shure Incorporated v. ClearOne, Inc., Case No. 1:17-cv-03078 (N.D. Ill.)
19	Declaration of Chad Wiggins dated October 23, 2018 as filed in Shure Incorporated v. ClearOne, Inc., Case No. 1:17-cv-03078 (N.D. Ill.)
20	SHURE000875 (Shure internal slide deck titled, "Global Olympus Alpha Test", dated June 2015)
21	SHURE000676 (Shure internal slide deck titled, "Project Olympus Phase 2 Development: United States East Coast and Chicago Interim Report", dated June 2014)
22	SHURE0000051 (Shure MXA910 User Guide)
23	Press release dated February 9, 2016 and available on Shure's website – "Shure Debuts Microflex Advance Ceiling and Table Array Microphones"
24	SHURE267985 (Shure Microflex Advance Technical Certification Handbook)
25	ClearOne COLLABORATE Live 1000 BMA CT Brochure Document
26	Sennheiser TeamConnect Ceiling 2 Ceiling Microphone Array Product Specification Document
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I. INTRODUCTIONS

A. Plaintiffs' Opening Introduction

In a seminal opinion, *Egyptian Goddess, Inc. v. Swisa, Inc.*, 543 F.3d 665 (Fed. Cir. 2008), the Federal Circuit held, en banc, that the *preferable course* of construing a design patent claim is to avoid a detailed verbal description that may lead the fact finder away from the proper goal—focusing on the design as a whole. Recognizing a claimed design is best described by the figures, the Federal Circuit has affirmed remarkably succinct claim constructions for design patents—merely construing the claim as shown (in the figures) and described (in the specification). Shure's proposed claim construction adopts this less-is-more approach by construing the claim as shown in the figures in solid lines. In an effort to complicate what should be a straightforward construction, in its proposed construction, ClearOne points to purported inconsistencies between the figures and the presence of function in the underlying article of manufacture—which is actually a prerequisite for design patentability. As discussed further below, ClearOne's construction is legally erroneous and procedurally improper, and Shure's construction should be adopted.

B. Defendants' Responsive Introduction

Pursuant to the Court's Amended Scheduling Order (D.I. 73), ClearOne proposes claim constructions that clarify the scope of the single claim of Shure's U.S. Design Patent No. D865,723 (the "'723 Patent"). *First*, the '723 Patent is indefinite and not enabled under 35 U.S.C. § 112. Figure 2 of the '723 Patent depicts and claims 16 notches or slots in a pattern around the back panel of the device, while Figure 4 depicts and claims the same back panel, but with a smooth, notchless edge. Because those are the only two figures in the patent that depict the back panel, and because both figures show clear, unobstructed views of the area where the notches appear in one figure, but not the other, neither a designer of ordinary skill in the art nor an ordinary observer would be able to determine the scope

of the claimed design. Put simply, neither the designer of ordinary skill nor the ordinary observer would be able to determine which design Shure intended to claim.

Second, the thin, square shape of Shure’s design should be excluded from the claim scope. Under Federal Circuit precedent, “[w]here a design contains both functional and non-functional elements, the scope of the claim must be construed in order to identify the non-functional aspects of the design as shown in the patent.” *Richardson v. Stanley Works*, 597 F.3d 1288, 1293 (Fed. Cir. 2010). The thin, square shape of Shure’s design serves a purely functional purpose—it allows an embodying device to be easily installed in a standard ceiling grid, by removing and replacing a standard ceiling tile.

Third, the extent to which the front face of Shure’s design (as depicted in Figure 3) looks like prior art ceiling vents should be excluded from claim scope. Shure’s decision to model its claimed design after prior art ceiling air vents was purely functional—it allowed the claimed device to blend invisibly into a drop ceiling by adopting an air-and-sound passing form with which people were already familiar.

Fourth, the Court should point out as part of claim construction the fact that numerous pieces of prior art feature the same thin, square shape as that shown in the claimed design, as well as the same perforated metal grille, both bounded by a white frame and not. As the Federal Circuit has explained, it can be helpful to point out as part of claim construction “various features of the claimed design as they relate to the accused design and the prior art.” *See Egyptian Goddess*, 543 F.3d at 680 (Fed. Cir. 2008). In so doing, a court properly focuses the claim scope on the ways in which the claimed design is distinct from the prior art. *Lanard Toys Ltd. v. Dolgencorp LLC*, --- F.3d---, 2020 WL 2478876, at *3 (Fed. Cir. May 14, 2020) (“*Lanard II*”).

Lastly, Shure’s argument that the ’723 Patent claims “a single component article of manufacture” is inappropriate for claim construction. This is a question relevant to damages, and requires a developed factual record. However, if the Court is inclined to address this issue now, the facts available demonstrate that the ’723 Patent is directed to only a portion of the housing depicted in the patent, not to the entire housing or to the various electrical and mechanical components associated with it.

C. Plaintiffs’ Reply Introduction

ClearOne’s proposed construction is incomplete, as well as legally and factually flawed. On the law, ClearOne fails to clearly identify the specific aspects of the claimed design that it alleges are dictated by function, improperly relies on aesthetic functionality, and erroneously proposes that the Court exclude functional aspects from the claimed design. On the facts, ClearOne fails to establish that any aspect of the claimed design is dictated by function and relies on “standard HVAC prior art” (where its own expert has testified that there is no such thing, the ordinary observer would not be aware of it, and the proffered prior art has been digitally altered). ClearOne has also failed to establish that the claimed design is indefinite by clear and convincing evidence. As in *Asano* and *Deckers*, this Court should find that, in the context of the claimed design as a whole, the minuscule differences between Figs. 2 and 4 of the claimed design do not preclude the ordinary observer from understanding the design as whole. *Ex Parte Asano*, 201 U.S.P.Q. 315 (B.P.A.I. 1978); *Deckers Outdoor Corp. v. Romeo & Juliette, Inc.*, No. 2:15-cv-02812, 2016 WL 7017219 (C.D. Cal. Dec. 1, 2016).

II. BACKGROUND AND RELEVANT FACTS

A. Plaintiffs’ Opening Background And Relevant Facts

Dating back to 1925, Shure has been a pioneer in the audio industry. (Ex. 2 Declaration of James Schanz (“Schanz Decl.”), ¶ 3.) Since that time, Shure has invested significant resources into

the development and design of innovative audio-visual products, including microphone products for conference rooms. (*Id.*) In 2016, Shure launched its first-in-class microphone arrays, the Microflex Advance (“MXA”) products. (*Id.*, ¶ 4.) The MXA910, MXA910W-A, and MXA910-60CM (collectively “MXA910 Products”) contain an array of beamforming microphones in an ornamental housing. As shown below, the MXA910 Products—all with a similar sleek design—are flexibly able to attach to a ceiling in a variety of configurations including flush mounted, below-ceiling mounted, and suspended, among others:



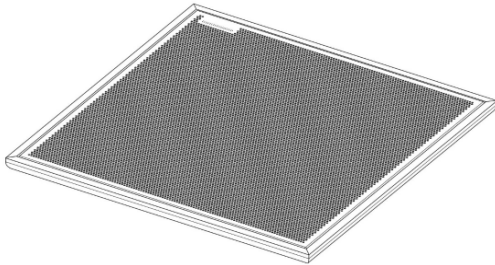
(Ex. 3.)

Shure sought to protect the specific ornamental design of its MXA910 Products, for which Shure filed and obtained design patent rights. In a disregard of these rights—and nearly three years after Shure commercialized its patented design—ClearOne developed a copycat microphone array, the BMA CT, which competes directly with Shure’s MXA910 Products and infringes the ’723 Patent.

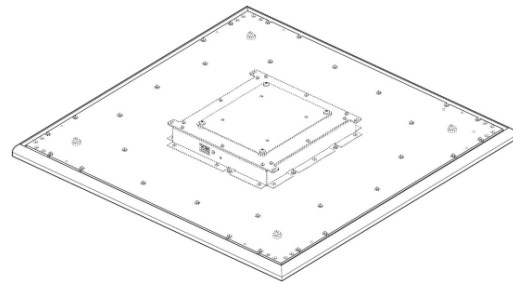
1. Shure’s Asserted ’723 Patent

Shure’s ’723 Patent is titled “Array Microphone Assembly” and lists inventors Elizabeth Cho, Gregory Lantz, and John Miller. (Ex. 1 at 1.) It is a continuation of a parent application filed April 30, 2015, which matured to U.S. Patent No. 9,565,493. (*Id.* at 1-2; Ex. 4 at 1.) The ’723 Patent issued on November 5, 2019. (Ex. 1 at 1.)

Shure asserts the sole claim of the '723 Patent, “the ornamental design for an array microphone assembly, as shown and described.” (*Id.*) The Claimed Design is as shown in the figures below and described in the accompanying figure descriptions from the specification:



**Fig. 1 -
“a front top, right perspective view of an
array microphone assembly, showing the
new design”**



**Fig. 2 -
“a rear, bottom left perspective thereof”**

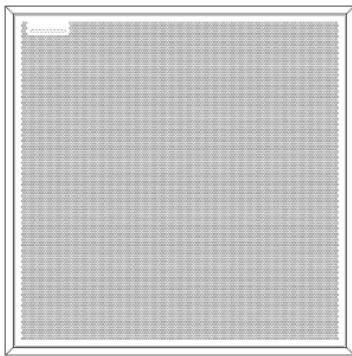


Fig. 3 - “a top plan view thereof”

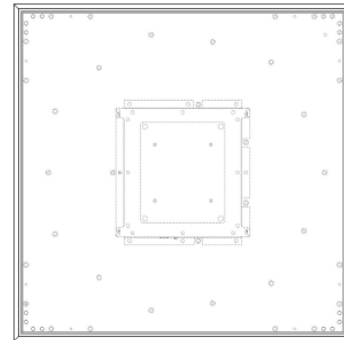


Fig. 4 - “a bottom plan view thereof”

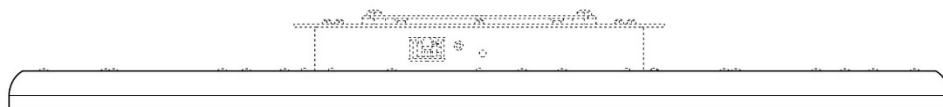


Fig. 5 - “a front view thereof”

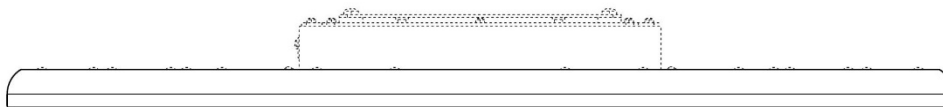


Fig. 6 - “a left side view thereof”

(*Id.* at 1, Sheets 1-5.) The written description of the '723 Patent states: “[t]he broken lines of even length shown in the drawings illustrate portions of the array microphone assembly that form no part of the claimed design.” (*Id.* at 1.)

2. Prosecution History of the '723 Patent

The U.S. Patent and Trademark Office (“USPTO”) allowed the application which became the '723 patent without objection or rejection regarding the figures or specification. *See generally* Ex. 5. Thus, no amendments were made to the as-filed figures or specification. *Id.* Similarly, the applicant made no arguments during prosecution—let alone any arguments that would affect the scope of the Claimed Design in the '723 Patent. *Id.*

III. LEGAL STANDARDS

A. Plaintiffs’ Opening Claim Construction Principles

Generally, the principles of patent law apply to both utility and design patents. *See Auto. Body Parts Ass’n v. Ford Glob. Techs., LLC*, 930 F.3d 1314, 1322 (Fed. Cir. 2019) (citing 35 U.S.C. § 171(b) (“The provisions of this title relating to patents for inventions shall apply to patents for designs, except as otherwise provided.”)). That said, the Federal Circuit has provided some specific direction regarding claim construction for design patents.

For utility patents, the words of a claim are generally given their ordinary and customary meaning as understood by a person of ordinary skill in the art at the time of the invention. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312-13 (Fed. Cir. 2005) (en banc). To determine a claim term’s ordinary and customary meaning within the field of art, a court should look to ““those sources available to the public that show what a person of skill in the art would have understood [the] disputed claim language to mean,”” including ““the words of the claims themselves, the remainder of the specification, the prosecution history, and extrinsic evidence concerning relevant scientific

principles, the meaning of technical terms, and the state of the art.” *Id.* at 1314 (quoting *Innova/Pure Water, Inc. v. Safari Water Filtration Sys., Inc.*, 381 F.3d 1111, 1116 (Fed. Cir. 2004)).

Courts are also required to construe design patent claims. *Catalina Lighting, Inc. v. Lamps Plus, Inc.*, 295 F.3d 1277, 1286 (Fed. Cir. 2002) (“First, the court must construe the design patent’s claim.”). Because “[d]esign patents are typically claimed as shown in drawings, [] claim construction must be adapted to a pictorial setting.” *Crocs, Inc. v. Int’l Trade Comm’n*, 598 F.3d 1294, 1302 (Fed. Cir. 2010) (citing *Contessa Food Prods., Inc. v. Conagra, Inc.*, 282 F.3d 1370, 1377 (Fed. Cir. 2002)). But unlike utility patents, whose construction may be verbose, courts have repeatedly cautioned against a detailed, verbal construction of the features in design patent drawings. Indeed, the Supreme Court recognized more than 130 years ago, that a design is “better represented by the photographic illustration than it could be by any description[.]” *Dobson v. Dornan*, 118 U.S. 10, 14 (1886).

The Federal Circuit has repeatedly endorsed this less-is-more approach. “Given the recognized difficulties entailed in trying to describe a design in words, the *preferable course* ordinarily will be for a district court not to attempt to ‘construe’ a design patent claim by providing a detailed verbal description of the claimed design.” *Egyptian Goddess*, 543 F.3d at 679 (emphasis added). Verbal descriptions “risk [] placing undue emphasis on particular features of the design and [] risk that a finder of fact will focus on each individual described feature in the verbal description rather than on the design as a whole.” *Id.* at 680; *see also Crocs*, 598 F.3d at 1302 (“[M]isplaced reliance on a detailed verbal description of the claimed design risks undue emphasis on particular features of the design rather than examination of the design as a whole.”). Accordingly, the Federal Circuit favors succinct claim constructions for design patents. *Compare*

Contessa, 282 F.3d at 1377 (approving district court’s construction of the asserted claim as meaning “a tray of a certain design, in Figures 4-5, containing shrimp arranged in a particular fashion, as shown in Figures 1-3”), *with Crocs*, 598 F.3d at 1302-03 (holding the administrative judge and the Commission erred in applying “a detailed verbal claim construction¹ . . . focused on particular features” and “needed [only] to apply the ordinary observer test to ‘the design shown in Figures 1-7.’”).

Under some circumstances, the Federal Circuit has noted that a bit more written guidance from the district court is appropriate and may be helpful to the jury. *Ethicon Endo-Surgery, Inc. v. Covidien, Inc.*, 796 F.3d 1312, 1333 (Fed. Cir. 2015). But those issues are limited to “the role of particular conventions in design patent drafting[,]” “the effect of any representations that may have been made in the course of the prosecution history[,]” and “distinguishing between those features of the claimed design that are ornamental and those that are purely functional.” *Egyptian Goddess*, 543 F.3d at 680.

District courts in the Third Circuit generally adhere to the “preferable course,” and ordinarily construe design patent claims as simply the ornamental design for [the claimed article] as shown and described in the patent’s drawings, providing concise additional guidance when warranted. *See Colgate-Palmolive Co. v. Ranir LLC*, No. 06-417 GMS, 2007 U.S. Dist. LEXIS

¹ The Administrative Law Judge and the ITC had applied the following “detailed” construction: “In summary, when the ’789 patent is considered as a whole, the visual impression created by the claimed design includes: footwear having a foot opening with a strap that may or may not include any patterning, is attached to the body of the footwear by two round connectors, is of uniform width between the two round connectors, has a wrench-head like shape at the point of attachment, and extends to the heel of the shoe; with round holes on the roof of the upper placed in a systematic pattern; with trapezoid-shaped holes evenly spaced around the sidewall of the upper including the front portion; with a relatively flat sole (except for upward curvature in the toe and heel) that may or may not contain tread on the upper and lower portions of the sole, but if tread exists, does not cover the entire sole, and scalloped indentations that extend from the side of the sole in the middle portion that curve toward each other.” *Crocs*, 598 F.3d at 1301.

55258, at *14-15 (D. Del. July 31, 2007) (adopting the following claim construction: “The ’D819 patent claims a design for a set of bristles for a toothbrush as shown in the figures in the patent. The claimed design includes the bristle design which is the portion of the design shown in solid lines. The remainder of the toothbrush, which is shown in broken lines, forms no part of the claimed design.”); *Junker v. Med. Components, Inc.*, No. 13-4606, 2017 U.S. Dist. LEXIS 179955, at *17 (E.D. Pa. Oct. 30, 2017) (adopting the following claim construction: “The D’839 Patent claims the ornamental design of a handle for an introducer sheath, as shown in Figures 1-9. The broken lines in the Figures of the D’839 Patent represent unclaimed subject matter.”); *Am. Bev. Corp. v. Diageo N. Am., Inc.*, 936 F. Supp. 2d 555, 572 (W.D. Pa. 2013) (adopting the following claim construction on a motion for preliminary injunction: “The ’672 patent claims an ornamental design for a flexible liquid-containing pouch, as shown in Figures 1-8 of Exhibit A.”).

B. Defendant’s Responsive Claim Construction Principles

For claim construction in a design patent case, though “a design is better represented by an illustration ... a court may find it helpful to point out, either for a jury or in the case of a bench trial by way of describing the court’s own analysis, various features of the claimed design as they relate to the accused design and the prior art.” *Egyptian Goddess*, 543 F.3d at 679-80. In addition, “a trial court can usefully guide the finder of fact by addressing a number of other issues that bear on the scope of the claim [such as] distinguishing between those features of the claimed design that are ornamental and those that are purely functional . . .” *Id.* at 680.

Contrary to Shure’s arguments, a proper claim construction of a design patent need not be short. To the contrary, in *Lanard Toys Ltd. v. Toys “R” Us-Delaware, Inc.*, Case No. 3:15-cv-849, 2019 WL 1304290 (M.D. Fla. Mar. 21, 2019) (“*Lanard I*”), the district court’s claim construction spanned several pages, and included: (1) a reproduction of the figures of the patent; (2) a detailed description of the functional and non-functional features of the design; and (3) a detailed

discussion, including pictures, of the prior art illustrating certain features of the claimed design that were “present in the prior art.” *Id.* at *11-*15. On May 14, 2020, the Federal Circuit affirmed that claim construction, holding that it “followed our claim construction directives to a tee.” *Lanard II*, 2020 WL 2478876, at *3.

C. Plaintiff’s Opening Functionality Principles

As a threshold matter, the claimed design and the article of manufacture that the design is applied to are distinct. *Hupp v. Siroflex*, 122 F.3d 1456, 1460 (Fed. Cir. 1997). And the fact that the underlying article of manufacture serves a function has no bearing on either the validity or the claim construction of the claimed design. “[T]he fact that the article of manufacture serves a function is a *prerequisite* of design patentability, not a defeat thereof.” *Id.* (emphasis added); *see also L.A. Gear, Inc. v. Thom McAn Shoe Co.*, 988 F.2d 1117, 1123 (Fed. Cir. 1993) (“An article of manufacture necessarily serves a utilitarian purpose[.]”). “The function of the article [of manufacture] itself must not be confused with ‘functionality’ of the design of the article.” *Hupp*, 122 F.3d at 1460 (citation omitted).

Moreover, in design patents, the concept of “functionality” appears in two different contexts: validity and claim construction. “For purposes of validity, . . . a design patent is invalid if its *overall appearance is dictated by function*, and therefore primarily functional.” *Ethicon*, 796 F.3d at 1333 (citation omitted) (emphasis added). “A design or shape that is entirely functional, without ornamental or decorative aspect, does not meet the statutory criteria of a design patent[.]” under 35 U.S.C. § 171. *Hupp*, 122 F.3d at 1460 (citing to *L.A. Gear*, 988 F.2d at 1123). Conversely, where “the overall appearance of a claimed design is not primarily functional, the design claim is not invalid, even if certain elements have functional purposes.” *Ethicon*, 796 F.3d at 1333 (citation omitted).

For purposes of claim construction, a design may contain both functional and ornamental elements, even though the scope of a design patent claim “must be limited to the ornamental aspects of the design” including “ornamental aspects” of “functional elements.” *Ethicon*, 796 F.3d at 1333. Therefore, courts can assist the jury by identifying ornamental aspects that are within the scope of the claimed design. The identified “ornamental aspects” include those aspects that are purely ornamental as well as ornamental aspects of functional elements. *Id.* at 1333-34 (holding that the scope of the design patent for an ultrasonic surgical device “encompass[ed] the depicted ornamental aspects of certain combinations of the trigger, torque knob, and activation button elements . . . in specific relative positions and orientations.”).

While courts have highlighted ornamental aspects of claimed designs, courts have steered away from using claim construction to *eliminate* elements from the claimed design as functional. *See Sport Dimension, Inc. v. Coleman Co.*, 820 F.3d 1316, 1321-22 (Fed. Cir. 2016) (holding the district court’s construction was erroneous “because it eliminate[d] whole aspects of the claimed design”); *Ethicon*, 796 F.3d at 1334 (reversing district court’s claim construction that factored out elements as purely functional). In sum, highlighting ornamental aspects of a claimed design is appropriate in claim construction, while completely eliminating any aspect of a design as functional is not.

The standard for whether an entire design is “dictated by function” in the invalidity context is the same as the standard for whether an element is “purely functional” during claim construction. *See Ethicon*, 796 F.3d at 1334 (reversing claim construction because the alleged function of the claimed elements not “essential to the use of the article”). When a design element is found to be “essential to the use of” the underlying article—that is, “dictated by the use or purpose of the article[,]” it cannot be the subject of a design patent. *Ethicon*, 796 F.3d at 1328 (internal quotations

and citation omitted). Although courts have considered a number of factors related to functionality, the “availability of alternative designs [that accomplish the same functionality] is ‘an important—if not dispositive—factor in evaluating the legal functionality of a claimed design.’” *SZ DJI Tech. Co. v. Autel Robotics USA LLC*, No. 16-706-LPS, 2019 U.S. Dist. LEXIS 215666, at *8-9 (D. Del. Dec. 16, 2019) (quoting *Ethicon*, 796 F.3d at 1329-30); *L.A. Gear*, 988 F.2d at 1123 (“When there are several ways to achieve the function of an article of manufacture, the design of the article is more likely to serve a primarily ornamental purpose.”). Other factors considered include “whether the protected design represents the best design; whether alternative designs would adversely affect the utility of the specified article; whether there are any concomitant utility patents; whether the advertising touts particular features of the design as having specific utility; and whether there are any elements in the design or an overall appearance clearly not dictated by function.” *Berry Sterling Corp. v. Prescor Plastics, Inc.*, 122 F.3d 1452, 1456 (Fed. Cir. 1997).

D. Plaintiff’s Opening Indefiniteness Principles

Like utility patents, the written description of a design patent must meet certain statutory requirements regarding enablement and definiteness under 35 U.S.C. § 112. *See* 35 U.S.C. § 171. “Because design patent claims are limited to what is shown in the application drawings, there is often little difference in the design patent context between the concepts of definiteness (whether the scope of the claim is clear with reasonable certainty) and enablement (whether the specification sufficiently describes the design to enable an average designer to make the design).” *In re Maatita*, 900 F.3d 1369, 1375 (Fed. Cir. 2018) (citing *Asano*, 201 U.S.P.Q. at 317).

The central question under § 112 is whether “the disclosure [of the application drawings and specification] sufficiently describes the design.” *Maatita*, 900 F.3d at 1376. Section 112 “ensure[s] that the disclosure is clear enough to give potential competitors (who are skilled in the art) notice of what design is claimed—and therefore what would infringe.” *Id.* Thus, while a claim

may be indefinite based on substantially “inconsistent drawings,” *id.* at 1375, “[m]echanical drawing errors and inconsistencies between the figures . . . which do not preclude the overall understanding of the drawing as a whole are an insufficient basis for holding the design both indefinite and insufficiently disclosed under 35 USC 112[.]” *Asano*, 201 U.S.P.Q. at 317 (concluding “the numerous mechanical drawing errors and figure inconsistencies noted by the examiner to be insignificant, and that they would present no problems as far as making the disclosed design to one of ordinary skill in the art”) (citations omitted).

IV. CLAIM CONSTRUCTION OF THE DISPUTED TERMS

A. Disputed Claim Construction

Below are the parties’ respective constructions of the sole claim of the ’723 Patent as outlined in their Joint Claim Construction Chart (D.I. 150):

<u>Claim</u>	<u>Plaintiffs’ Construction</u>	<u>Defendant’s Construction</u>
“The ornamental design for an array microphone assembly, as shown and described”	<p>The ornamental design for a single component article of manufacture, specifically an array microphone assembly, as shown in the solid lines and associated claimed surfaces of Figures 1-6 and described in the specification of the ’723 patent.</p> <p>The Claimed Design should be considered as a whole and the broken lines in Figures 1-6 of the ’723 patent form no part of the Claimed Design. No features of the Claimed Design are purely functional and/or dictated solely by function, thus all features of the Claimed Design have ornamental design elements and</p>	<p>Indefinite. The scope of the claim is not clear with reasonable certainty because the ordinary observer would have no way of resolving the differences between Figure 2 (showing and claiming a pattern of sixteen slots around the periphery of the back panel) and Figure 4 (showing and claiming a square shaped back panel with no slots around the periphery).</p> <p>To the extent the claim can be construed, the Court should determine that the overall size and shape of the claimed array microphone assembly design is functional because, as the array microphone assembly is intended to replace a standard ceiling tile, the overall size and shape of the claimed</p>

	should be included in the claim construction.	array microphone assembly is dictated by the size and shape of a standard ceiling tile. To the extent the claim can be construed and the Court believes it should determine the appropriate article of manufacture at the claim construction phase, the Court should determine that the claimed design is for a multicomponent article of manufacture.
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B. Plaintiffs' Opening Position

1. Shure's Construction Is Consistent with the Federal Circuit's Direction

Shure's construction adheres to the Federal Circuit's "preferable course" of construing design patent claims—that is *not* to provide a detailed verbal description of the claimed design, but rather to rely on the figures to provide the best description. *Egyptian Goddess*, 543 F.3d at 679 (citation omitted). Moreover, while Shure's proposed construction provides additional guidance on design conventions and functionality considerations, *Ethicon*, 796 F.3d at 1333, this additional guidance is succinct and does not go as far as providing a detailed verbal construction of the claimed design. *See Colgate-Palmolive*, 2007 U.S. Dist. LEXIS 55258, at *14-15 (providing the following claim construction: "The 'D819 patent claims a design for a set of bristles for a toothbrush as shown in the figures in the patent. The claimed design includes the bristle design which is the portion of the design shown in solid lines. The remainder of the toothbrush, which is shown in broken lines, forms no part of the claimed design.").

a) The Broken Lines in the Claimed Design Should Be Construed As Unclaimed Portions of the Article and Not a Boundary

The specification of the '723 Patent includes the following: “the broken lines of even length shown in the drawings illustrate portions of the array microphone assembly that form no part of the claimed design.” (Ex. 5 at 109-11.)

The Manual of Patent Examining Procedure (“MPEP”) provides guidance on how broken lines in design patent drawings impact the scope of a claimed design. U.S. Pat. & Trademark Office, Manual of Patent Examining Procedure § 1503.02 (9th ed. 2018). Section 1503.02.III of the MPEP provides common uses of broken lines including: (1) environmental; (2) portion of the article that is not claimed; and (3) boundary. So called “environmental” broken lines illustrate “[s]tructure that is not part of the claimed design but is considered necessary to show the environment in which the design is associated[.]” *Id.* Broken lines can also be used to illustrate “portions” of the article that form no part of the claimed design. *Id.* at Form ¶ 15.50.02 (Description of Broken Lines). In other instances, broken lines may indicate “define the bounds of a claimed design . . . when the boundary does not exist in reality in the article embodying the design.” *Id.* The applicant must indicate the purpose of the broken lines used in the figures in the specification. *See* MPEP, Section 1503.01.II. When the claimed design includes *unclaimed portions* or *environmental structure*, the MPEP recommends that an examiner “notify” an applicant that a specification should include a statement similar to the following:

“The broken line showing of [name of structure] is for the purpose of illustrating [portions of the name of structure or environmental structure] and forms no part of the claimed design.”

See MPEP § 1503.02.III; form paragraph 15.50.02 Description of Broken Lines. Likewise, when the claimed design includes a *boundary* line, an applicant should be notified to include in the specification a statement similar to:

“The [insert type of broken line, e.g., “dashed”] broken line(s) define the bounds of the claimed design and form no part thereof.”

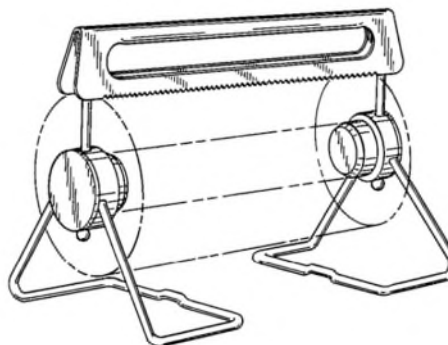
See Id.; Form Paragraph 15.50.05, Description of Broken Lines as Boundary of Design.

The USPTO provides the following example of “environmental” and “boundary” broken lines:

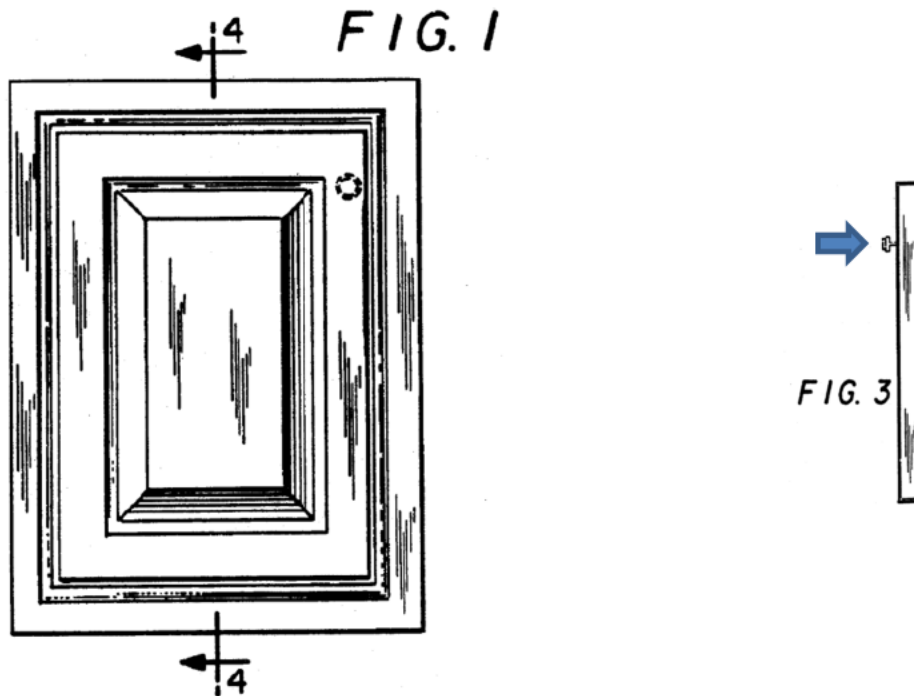
Broken Lines Showing Unclaimed Boundary



Broken Lines Showing Unclaimed Environmental Structure



See Design Patent Guide, United States Patent and Trademark Office, <https://www.uspto.gov/patents-getting-started/patent-basics/types-patent-applications/design-patent-application-guide> (last visited April 18, 2020). And the door pull of the below design patent directed to an Integrated Door and Frame is an example of a “portion” that is not part of the claimed design:



U.S. Patent No. 338,718, Fig. 1 (front elevation view) (L),
Fig. 3 (side elevation view, annotated) (R)

See Door-Master Corp. v. Yorktowne, Inc., 256 F.3d 1308, 1310-11 (Fed. Cir. 2001).

Consistent with this MPEP guidance, the elements shown in broken lines in Figures 1-6 of the '723 Patent should be construed as they are described in the specification as “portions of the article that form no part of the claimed design.” (Ex. 1 at 1; Ex. 6 Declaration of Paul Hatch (“Hatch Decl.”), ¶¶ 20-21.)

b) The Claimed Design of the '723 Patent Is Not Dictated By Function and ClearOne's Construction Should Be Rejected

ClearOne asks the Court to adopt a construction “that the *overall size and shape of the claimed array microphone assembly design is functional* because, as the array microphone assembly is intended to replace a standard ceiling tile, the overall size and shape of the claimed array microphone assembly is dictated by the size and shape of a standard ceiling tile.” (D.I. 150.) (emphasis added). In other words, ClearOne asks the Court *during claim construction* to construe

the entire Claimed Design of the '723 patent as functional and presumably invalid under 35 U.S.C. § 171. To the extent this is ClearOne's argument, this argument fails because the entire Claimed Design of the '723 is not "dictated by function," and moreover, claim construction is not the appropriate time for ClearOne to ask the Court to make such a determination.

As explained above, with respect to validity, the inquiry is whether the *entire* Claimed Design of the '723 Patent is dictated by function. *Ethicon*, 796 F.3d at 1333. It is not. The record shows many alternative designs for a microphone array, e.g.:

Audix Reference



Fullsound Reference



ClearOne Reference



Kenny Reference



(Hatch Decl., ¶ 29.)

To the extent ClearOne's argument rests on the article of manufacture to which the Claimed Design of the '723 patent may be applied by fitting the "size and shape" of a standard ceiling tile, this is also plainly wrong. Alternative designs with this same capability also exist. The Sennheiser TC2 (shown below) also fits the "size and shape" of a standard ceiling tile, but has a different overall visual impression:



(Ex. 7.) In addition, the Claimed Design does not require any particular mounting configuration (e.g., flush or otherwise mounted), and nor does Shure’s embodying product, the MXA910.

Moreover, to the extent ClearOne’s proposed construction as to functionality is a backdoor attempt to argue invalidity, ClearOne’s construction is procedurally premature. (D.I. 73 (scheduling dispositive motions for April 2021)); *see also Colgate-Palmolive*, 2007 U.S. Dist. LEXIS 55258 at *7-8 (“declin[ing] to identify . . . which features of Colgate’s design patents are functional. . . . Cognizant of the court’s role as the construer of patent claims and the need for claim construction to be complete before a jury deliberates on infringement, the court may further limit the current construction at trial by factual determinations regarding functionality and ornamentality of the included features.”); *ADC Telecomms., Inc. v. Panduit Corp.*, 200 F. Supp. 2d 1022, 1033 (D. Minn. 2002) (“Panduit may not transition a claim construction argument into a summary judgment argument for invalidity due to functionality.”).

c) The ’723 Patent Is Not Indefinite, Contrary to ClearOne’s Erroneous Assertion

Additionally, ClearOne’s construction would have the Court construe the claim as indefinite. (D.I. 150.) According to ClearOne, the “scope of the claim is not clear with reasonable certainty because the ordinary observer would have no way of resolving the differences between Figure 2 (showing and claiming a pattern of sixteen slots around the periphery of the back panel) and Figure 4 (showing and claiming a square shaped back panel with no slots around the periphery).” (*Id.*) “Resolving the differences,” however, is not the proper standard for determining whether a claim is indefinite under § 112. Rather, the appropriate standard is whether the provided disclosure is clear enough to give potential competitors—skilled in the art—notice of what design is claimed. *Maatita*, 900 F.3d at 1376.

Here, ClearOne makes much of the “sixteen slots” on the back panel of Figure 2 (shown below and annotated to highlight the “sixteen slots”) purportedly missing from Figure 4.

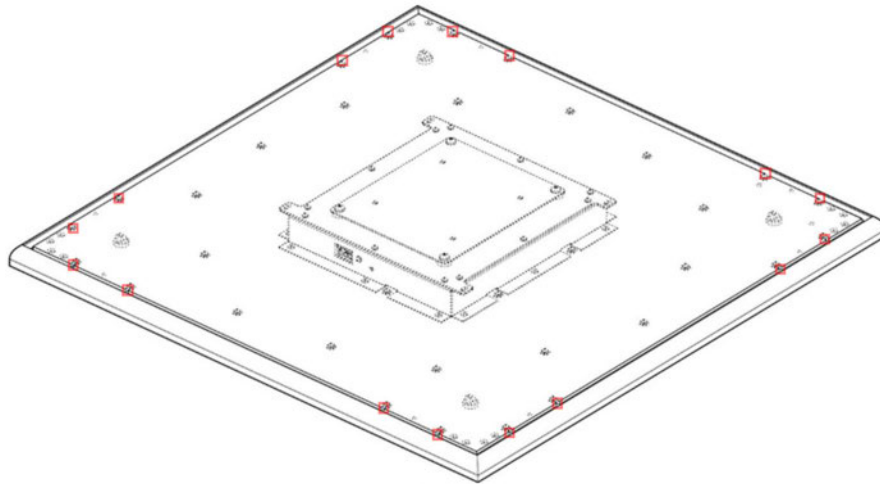


Fig. 2 Annotated

ClearOne fails to support its indefiniteness construction. Not only are the slots unclaimed subject matter, any inconsistencies among them are nothing more than insignificant mechanical drawing errors and do not preclude the overall understanding of the design as a whole. *Asano*, 201 USPQ at 317. Further proving that these slots are unclaimed and inconsequential, when Shure asked ClearOne via interrogatory about its efforts to copy or avoid copying the MXA910, ClearOne made no mention of such slots. (Ex. 8 at 36-38.)

2. The '723 Patent Is Directed to a Single Article of Manufacture

Finally, in an effort to mitigate the extent of its total profits liability resulting from its infringement, ClearOne would have the Court find “that the claimed design is for a multicomponent article of manufacture.” (Dkt. 150.) This position is incorrect and unsupported by the record.

Under 35 U.S.C. § 289, a design patent owner may recover the “total profit[s]” earned by an infringer who “applies” the “patented design” to “any article of manufacture.” Changing the traditional rule that total profits under Section 289 were always based on the entire infringing product, the Supreme Court in *Samsung Elecs. Co. v. Apple* held that the infringing product may be either the product as a whole or a component part of the product. 137 S. Ct. 429, 436 (2016). While neither the Patent Act nor the Supreme Court provide guidance on how to determine the “article of manufacture,” the Department of Justice proposed a four-factor test for determining the “article of manufacture” under § 289² which was not adopted by the Supreme Court, but has been adopted by many district courts.³

Under the DOJ’s test, the presumption is that the relevant article of manufacture is the entire product as sold. (DOJ Am. Br. at 30.) The burden is on an accused infringer to produce evidence that the relevant “article of manufacture” is something less, specifically “a portion of an entire product as sold.” (*Id.*) The first factor of the DOJ test considers “the scope of the design claimed in the [] patent, including the drawing and written description.” (*Id.* at 27.) This factor “provides insight into which portions of the underlying product the design is intended to cover . . . by identifying the article of manufacture that the patentee views as the article to which the design is applied” and identifying “that the design is intended to be applied to a component of the product.” (*Id.* at 27-28.) The second factor considers “the relative prominence of the design within

² The DOJ submitted this test in an amicus brief (“DOJ Am. Br.”) to the Supreme Court in *Samsung*. A copy of the DOJ’s amicus brief is available at: <http://www.scotusblog.com/wp-content/uploads/2016/06/15-777npUnitedStates.pdf> (last visited April 17, 2020).

³ *Nordock, Inc. v. Sys., Inc.*, No. 11-CV-118, 2017 U.S. Dist. LEXIS 192413, at *15-16 (E.D. Wis. Nov. 21, 2017); *Apple Inc. v. Samsung Elecs. Co.*, No. 11-CV-01846, 2017 U.S. Dist. LEXIS 177199, at *82-85 (N.D. Cal. Oct. 22, 2017); *Red Carpet Studios v. Midwest Trading Grp., Inc.*, No. 1:12-cv-501 (S.D. Ohio Mar. 17, 2020) (order denying motion in limine).

the product as a whole.” (*Id.* at 28.) “If the design is a minor component of the product, like a latch on a refrigerator” it may suggest that the “‘article’ should be the component embodying the design” (*Id.*) On the other hand, a design “affecting the appearance of the product as a whole” suggests that the article is the entire product. (*Id.*) The third factor, “whether the design is conceptually distinct from the product as a whole,” considers whether the “product contains other components that embody conceptually distinct innovations[.]” (*Id.* at 28-29.) The last factor considers the “physical relationship between the patented design and the rest of the product[.]” (*Id.* at 29.) A design is applied to a component and not the product if the design “pertains to a component that a user or seller can physically separate from the product as a whole,” or the design “is embodied in a component that is manufactured separately from the rest of the product, or if the component can be sold separately (for instance, for replacement purposes).” (*Id.*) ClearOne cannot meet this burden show the article of manufacture is anything other than the entire array microphone assembly.

Here, as claimed, as depicted in the figures, and as provided in the written description of the ’723 Patent, the Claimed Design is a single-component article of manufacture. Regarding the first factor, the ’723 patent claims a “design for an array microphone assembly” as a whole, not component parts thereof. (Hatch Decl., ¶ 22.) As to the second factor, the Claimed Design—as shown in solid lines in the figures—affects the appearance of the product as a whole. (*Id.*) Only minor elements are shown as unclaimed subject matter. (*Id.*, ¶¶ 21-22.) Even with these elements removed, the resulting product would be an array microphone assembly, not a component thereof. (*Id.*, ¶ 22.) The third factor also supports the Claimed Design of the ’723 Patent being a single-component article of manufacture. The design is not conceptually distinct from the product as a whole—indeed the MXA910 was developed with the ornamental design as a part of a unitary

concept. (Schanz Decl., ¶ 6.) As to the last factor, the Claimed Design and the product are unitary. (*Id.*) The Claimed Design and the MXA910 are manufactured at the same facility and at the same time. (*Id.*) The MXA910 comes out of the box as a single unit and is installed as a single unit. (*Id.*, ¶¶ 5-6.) No assembly of the MXA910 by a user is involved, and normal usage of the MXA910 out of the box does not require disassembling or opening the product in any manner. (*Id.*) Further, a user does not physically separate the Claimed Design from the underlying product during normal usage. (*Id.*)

ClearOne bears the burden of to show that the Claimed Design of the '723 Patent is but a portion of an entire product as sold. ClearOne clearly cannot meet this burden. As discussed above, the Claimed Design of the '723 Patent is a single-component article of manufacture as claimed, in concept, and as commercially embodied and used.

C. Defendant's Responsive Position

1. The Device Underlying the '723 Patent

The '723 Patent recites “[t]he ornamental design for an array microphone assembly, as shown and described.” '723 Patent (Ex. 1) at Cover Page. The '723 Patent is a continuation of a utility patent, U.S. Pat. No. 9,565,493 (the “'493 Patent”), which claims an “array microphone assembly that is sized and shaped to be mountable in a drop ceiling in place of a ceiling tile.” '493 Patent (Ex. 4) at 2:7-15, Claim 17; *see also* ClearOne's Technical Tutorial, D.I. 168-1 at 4-11. Such a product is appropriate for use in installed audio conferencing systems, which include high-end and long-lasting audio conferencing products that are permanently or semi-permanently integrated with the conference room design. *See* Ex. 9, 2020-05-20 Declaration of Paul Waadevig (“Waadevig Decl.”), ¶5.

2. Level of Ordinary Skill in the Art

The person of ordinary skill in the art (“POSITA”) should be a designer with at least: (1) a bachelor’s or higher degree in industrial design or mechanical engineering; and (2) at least two years of experience designing audio/visual equipment. *See* Ex. 10, 2020-05-20 Declaration of Joel Delman (“Delman Decl.”), ¶¶62-64; Ex. 11, 2020-05-20 Declaration of Michael P. Hudson (“Hudson Decl.”), ¶¶ 20-21.

3. Ordinary Observer

In the design patent context, the “ordinary observer” means “the principal purchaser[] of the articles” *Gorham Mfg. Co. v. White*, 81 U.S. 511, 528 (1871). Here, the principal purchasers of the claimed embodying product—the Shure MXA910—and the accused products—the ClearOne BMA CT and BMA CTH—are sophisticated purchasers well familiar with installed audio conferencing equipment generally, and the Shure and ClearOne brands and their respective products specifically. Ex. 9 (Waadevig Decl.) ¶31. These purchasers are either: (1) sophisticated organizational end-user purchasers of installed audio conferencing equipment; or (2) specialized intermediaries in the audio-visual market, such as distributors, integrators, consultants, and installers. *Id.* To the extent an end-user purchaser in this market is not sophisticated in the brands and products available, that purchaser necessarily works closely with, and relies on, a specialized intermediary who *is* sophisticated in those ways. *Id.* Shure’s and ClearOne’s sales records show that most purchasers of the products at issue are [REDACTED] *Id.*; *see also* Exs. 59 and 60. In practice, sophisticated organizational purchasers such as AV specialists at large corporations and organizations may provide substantive input in purchasing decisions, while smaller corporations rely on integrators to make purchasing decisions. Ex. 9 (Waadevig Decl.) ¶31.

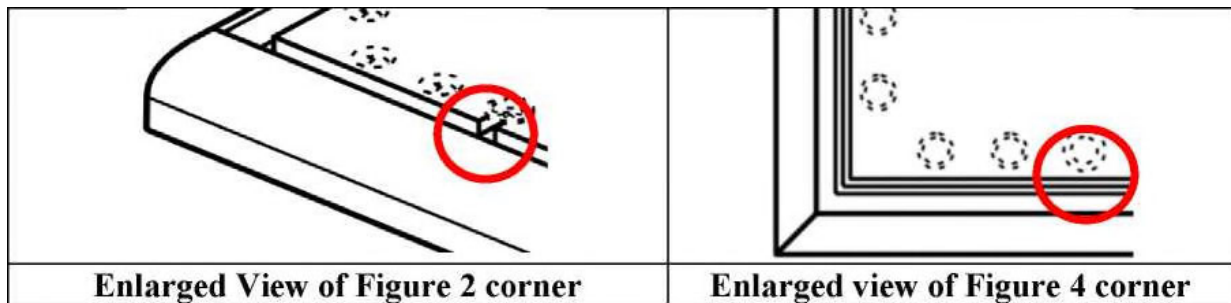
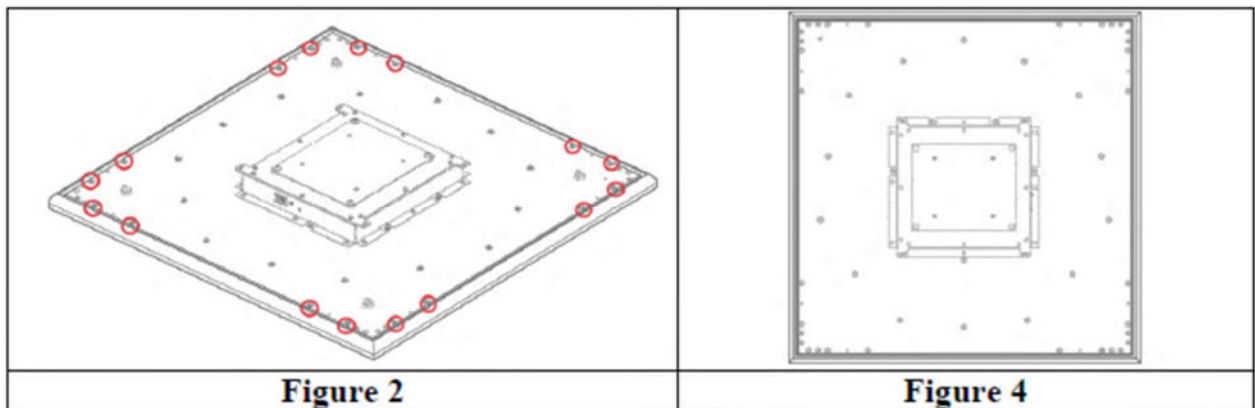
4. The '723 Patent Is Indefinite And Not Enabled Because Neither A POSITA Nor An Ordinary Observer Would Understand Whether The Claimed Design Includes 16 Open Slots.

A design patent “is indefinite for § 112 purposes whenever its claim, read in light of the visual disclosure (whether it be a single drawing or multiple drawings), ‘fail[s] to inform, with reasonable certainty, those skilled in the art about the scope of the invention.’” *In re Maatita*, 900 F.3d 1369, 1376 (Fed. Cir. 2018) (citing *Nautilus, Inc. v. Biosig Instruments, Inc.*, 572 U.S. 898 (2014)). “Given that the purpose of indefiniteness is to give notice of what would infringe, . . . in the design patent context, one skilled in the art would assess indefiniteness from the perspective of an ordinary observer” since that is the perspective from which infringement is judged. *Maatita*, 900 F.3d at 1377. “Thus, a design patent is indefinite under § 112 if one skilled in the art, viewing the design as would an ordinary observer, would not understand the scope of the design with reasonable certainty based on the claim and visual disclosure.” *Id.*

“Because design patent claims are limited to what is shown in the application drawings, . . . there is often little difference in the design patent context between the concepts of definiteness (whether the scope of the claim is clear with reasonable certainty) and enablement (whether the specification sufficiently describes the design to enable an average designer to make the design).” *Id.* at 1375 (internal citations omitted); *see also Asano*, 201 U.S.P.Q. at 317 . “A visual disclosure may be inadequate—and its associated claim indefinite—if it includes multiple, internally inconsistent drawings.” *Maatita*, 900 F.3d at 1375-76 (citing *Times Three Clothier, LLC v. Spanx, Inc.*, Case No. 13-cv-2157, 2014 WL 1688130, at *7–9 (S.D.N.Y. Apr. 29, 2014) (finding design patents invalid for indefiniteness because the drawings were inconsistent)).

The '723 Patent is indefinite and not enabled because Figures 2 and 4 depict inconsistent designs. As shown below, while Figure 2 depicts 16 slots arranged in a pattern around the back panel of the design, Figure 4 depicts clean, uninterrupted lines that form a slot-less square back

panel. This is a significant difference, especially in light of the plain appearance of the backside of the design. Ex. 10 (Delman Decl.) ¶¶65-68, 72-75. When unclaimed elements are put aside, the backside consists largely of a series of nested squares, with mitered corners between the two outermost squares. *Id.*, ¶67. In that context, the slots shown in Figure 2 are a prominent design element: they are *symmetrical* in their orientation, *identical* in size and appearance, and *carefully* placed for maximum aesthetic impact along the perimeter of a highly prominent feature of the claimed design. *Id.*, ¶¶68, 73.

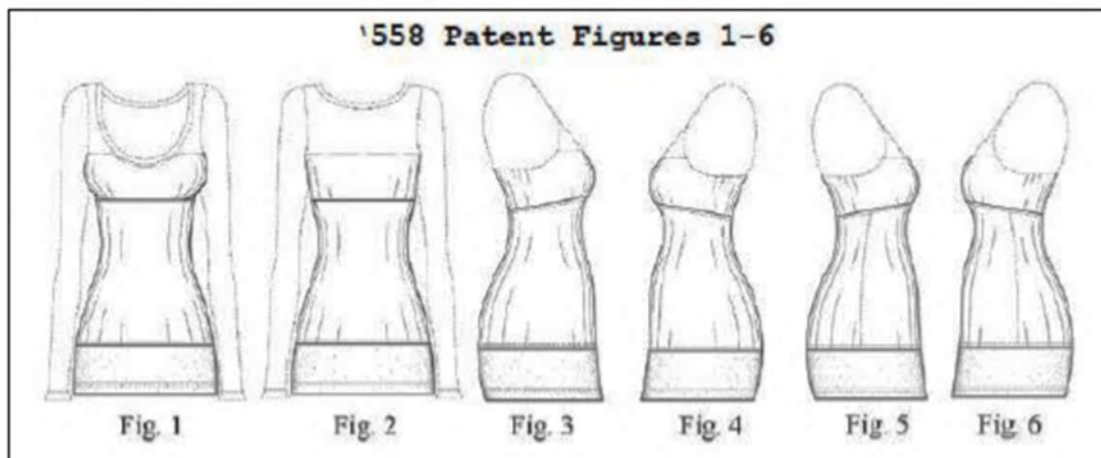


'723 Patent, Figs. 2, 4. To a POSITA, viewing these figures from the perspective of an ordinary observer, a square plate with 16 cut-outs on the edges is materially different from a square plate with clean-cut edges. *Id.*, ¶¶73, 76.

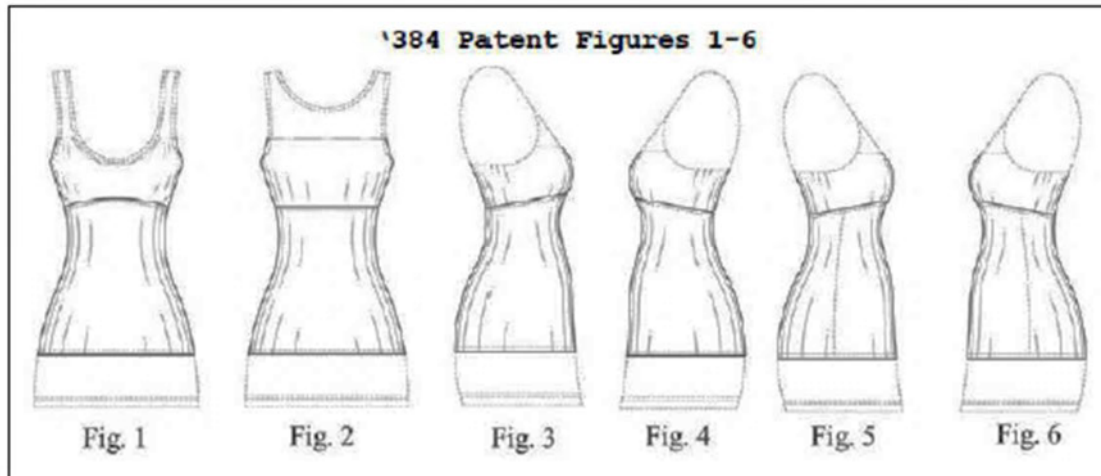
Nor is this a case where a close review of the figures would reveal to a POSITA, or an ordinary observer, which figure depicts the claimed design, and which contains an error. *Id.*, ¶¶68,

72, 76. Only Figure 2 and Figure 4 depict the back plate, and both figures present clear, unobscured views of that back plate. There is thus no reason a POSITA or an ordinary observer would know to understand one figure, and not the other, as depicting the claimed design. *Id.*, ¶76. In fact, the inconsistency prevents an ordinary observer from understanding the claimed design and comparing it to the Accused Product. *Id.* It also fails to enable a designer of ordinary skill in the art to create one of most prominent features of the claimed design—the outline for the back panel. *Id.*

The inconsistencies here are similar to the invalidating inconsistencies courts found in *Times Three Clothier and Masonite*. In *Times Three Clothier*, at the *Markman* stage, the court held that two design patents for garments were invalid for indefiniteness. 2014 WL 1688130, at *7–*8. In the first patent, the front/back views of claimed design show a flat ornamental line, while the side views show an angled line:



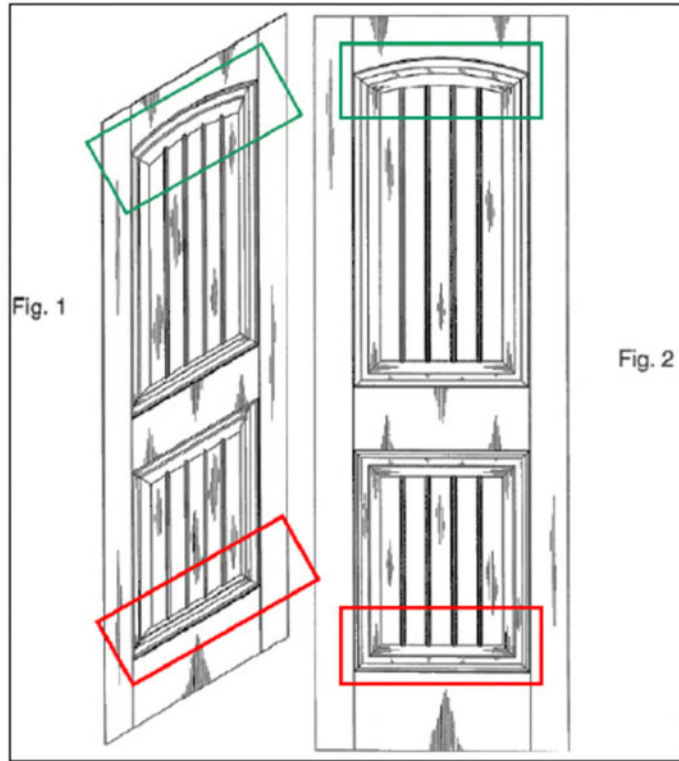
Similarly, in the second patent, the back view depicts a back extending above the top of the side of the garment, while the side views depict a back ending at the top of the side:



The court concluded for both patents that “[b]ecause one skilled in the art could only guess as to which of these designs is claimed,” the patents were “insolubly ambiguous” and thus invalid for indefiniteness.” *Id.* at *7 (quoting *TevaPharm., USA, Inc. v. Sandoz, Inc.*, 723 F.3d 1363, 1368 (Fed. Cir. 2013)), *8 (same). In so doing, the court distinguished cases in which inconsistencies had not been fatal to the validity of patents, because either: (1) multiple views of a patent were consistent, with only one view being inconsistent; or (2) for an inconsistency between two figures, one of the figures was less clear as to the feature in question. *Id.* at *7. Neither of those exceptions applies here.

Similarly, in *Masonite*, the court granted summary judgment of invalidity of two design patents based on indefiniteness. *Masonite Corp. v. Craftmaster Mfg., Inc.*, No. 09 C 2131, 2011 WL 13327344, at *4-7 (N.D. Ill. Apr. 28, 2011). The court found that in both patents, Figure 1 shows five contour lines at both the top and bottom of a door facing, whereas Figure 2 shows four at the top and six at the bottom.

The court held both patents indefinite because the “drawings are plainly irreconcilably inconsistent and would fail to apprise one skilled in the art of the scope of the claim.” *Id.* at *5. Like the *Times Three* court, the *Masonite* court distinguished cases “where there is one aberrant drawing amongst several consistent drawings.” *Id.* at *6. The court also rejected Masonite’s request that it “excuse these discrepancies as minor,” noting that “no portions of a design [] are ‘immaterial’ or ‘not important.’ ... [D]esign is a unitary thing and all of its portions are material in that they contribute to the appearance which constitutes the design.” *Id.* at *6 (citing *In re Blum*, 374 F.2d 904, 907 (C.C.P.A. 1967)).



Shure’s Opening Brief makes two arguments regarding ClearOne’s indefiniteness construction. First, Shure argues that the slots are unclaimed subject matter. (*Supra* p. 20.) Shure has since withdrawn this argument, conceding at oral argument that Figure 2 claims those slots. *See* Ex. 12 (TRO Hr’g Tr.) at 31:23-32:2. Next, Shure argues that the inconsistencies between Figure 2 and Figure 4 are “nothing more than insignificant mechanical drawing errors [that] do not preclude the overall understanding of the design as a whole.” (*Supra* p. 20 (citing *Asano*, 201 USPQ at 317).) This argument fails for several reasons. *First*, Shure has not cited any evidence showing that these inconsistencies are in fact mechanical drawing errors. Ex. 10 (Delman Decl.)

¶72 (explaining that there are generally no “errors” in CAD drawings). *Second*, even if they *were* mechanical drawing errors, as explained above they are serious enough that they result in the scope of the claim being unclear to either an ordinary observer or to one of ordinary skill in the art. *Id.*, ¶76. Shure has presented no evidence to the contrary. Ex. 13 (2020-05-18 Dep. Tr. of Paul Hatch, Shure’s expert at 55:6-56:18) (specifically disclaiming any opinions on this point).

Third, *Asano* is distinguishable. That case involved a design patent for a toy vehicle that included small discrepancies among the figures. *Id.* at *4. The Board of Patent Appeals and Interferences reviewed the inconsistencies identified by the patent examiner and concluded that “such . . . discrepancies, *if they exist*, [are] sufficiently insignificant to the total disclosure of the application design to provide a basis for a rejection under 35 USC 112.” *Id.* at *2 (emphasis added). In so holding, the Board emphasized both: (1) that “the present design is directed to a toy”; and (2) “the extreme detail of the design presented by the [patentee] in the figures.” *Id.* at *4. The court in *Masonite* distinguished *Asano* for these reasons, noting that a toy vehicle “has far more distinguishing features to set it apart from other toy vehicles than a commercial door facing. *Masonite*, 2011 WL 13327344 at *6, n.7. The same reasoning applies here. The drawings in Figures 2 and 4 contain even fewer features than the commercial door facings in *Masonite*.

In its Objections to the Report and Recommendation Denying Request for Temporary Restraining Order (D.I. 187), Shure relies on *Deckers*, to argue that inconsistent drawings alone do not render a design patent indefinite. In that case, the court found it “apparent that a reasonable boot designer, in deciding whether the claimed design includes a notch, would look to the drawings that provide the clearer—not the more obscured—view of that part of the boot.” *Id.* at *4. This analysis is inapplicable here. As described above, unlike in *Deckers*, neither Figure 2 nor Figure 4 presents an obscured or unclear view of the relevant part of the back panel.

Because a POSITA, viewing the '723 Patent either from her own perspective or that of an ordinary observer, would not know with reasonable certainty whether Figure 2 or Figure 4 shows the claimed design, the '723 Patent is both indefinite and not enabled.

5. Functional Aspects of the '723 Patent Must Be Excluded from Claim Scope.

“Where a design contains both functional and non-functional elements, the scope of the claim must be construed in order to identify the non-functional aspects of the design as shown in the patent.” *Richardson*, 597 F.3d at 1293; *see also Lanard II*, 2020 WL 2478876, *3 (describing district court’s claim construction as “follow[ing] our claim construction directives to a tee” where it “considered the functional features of the design, as well as the functional purpose of the writing utensil as a whole, including its proportions”). “[I]t would indeed be improper to allow” a design patent to “include[] utilitarian elements” in the “claim scope.” *Richardson*, 597 F.3d at 1294. “A claim to a design containing numerous functional elements ... necessarily mandates a narrow construction.” *Id.*

At the *Markman* stage, the *Berry Sterling* factors “may serve as a useful guide for claim construction functionality.” *Sport Dimension*, 820 F.3d at 1322 (citing *Berry Sterling Corp. v. Pescor Plastics, Inc.*, 122 F.3d 1452, 1455 (Fed. Cir. 1997)). These factors include: (1) “whether the protected design represents the best design”; (2) “whether alternative designs would adversely affect the utility of the specified article”; (3) “whether there are any concomitant utility patents”; and (4) “whether the advertising touts particular features of the design as having specific utility.” *Id.*

a) The thin, square shape

Applying the *Berry Sterling* analysis to the thin, square shape of the claimed design reveals that that aspect of the design is dictated by its functional purpose—to fit into a standard ceiling






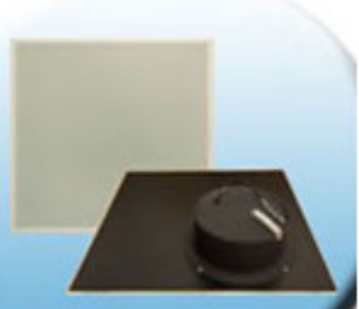
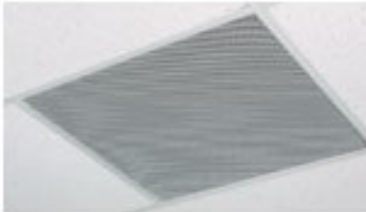


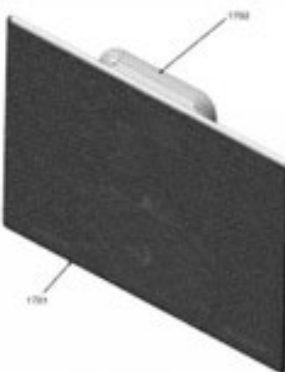

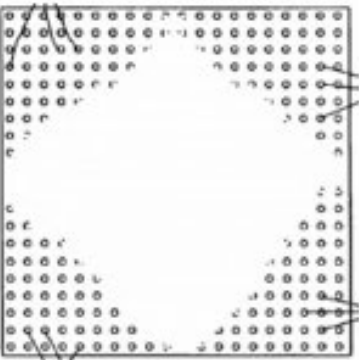
grid in place of a standard ceiling tile—and therefore must be excluded from the claim scope. *Richardson*, 597 F.3d at 1294 (“[I]t would indeed be improper to allow [the design patentee] a claim scope that includes the utilitarian elements of his multi- function tool.”).⁴ First, the thin, square shape represents the best design for the purpose, because it is the only design that allows an array microphone to be mounted in a standard ceiling grid simply by replacing a standard ceiling tile. Ex. 11 (Hudson Decl.) ¶¶76-81; Ex. 10 (Delman Decl.) ¶81; *see also* Ex. 14 (Declaration of Shure Expert Wilfred LeBlanc) at 14 (“Specifically, the [MXA910] microphone array is a planar array on a circular substrate that is placed in an approximately 2’ by 2’ housing sized to align with the grid of a drop ceiling in the same manner as light fixtures, fan casings and other objects that are commonly packaged in ceilings. ... “[T]hey are sized and shaped to *replace* ceiling tiles”); *Cornucopia Prods., LLC v. Dyson Inc.*, No. CV 12-00234, 2012 WL 3094955 at *6 (D. Ariz. July 27, 2012) (“Dyson’s nozzle ... could be shaped differently, e.g., as a square.... But it cannot be disputed that a circle is the only design that will achieve the sort of air discharge pattern and effectiveness normally associated with a table fan. ... It is unworthy of belief to say that this was purely an aesthetic, ornamental choice.”); *Best Lock Corp. v. Ilco Unican Corp.*, 94 F.3d 1563, 1566 (Fed. Cir. 1996) (affirming invalidity finding for keyblade design that mated to keyway); *Static Control Components v. Lexmark Int’l*, 697 F.3d 387, 422 (6th Cir. 2012) (affirming invalidity finding for ink cartridge design because it was “dictated solely by the printer with which they are compatible”); *In re Carletti*, 328 F.2d 1020, 1022 (C.C.P.A. 1964) (affirming invalidity finding for gasket designed to fit standard specifications). That is why all three ceiling-tile

⁴ ClearOne is not, as Shure mistakenly claims, asking the Court “to construe the entire Claimed Design of the ’723 Patent as functional and presumably invalid under 35 U.S.C. § 171.” (*Supra* pp. 17-18.)

beamforming microphones on the market adopted a thin, square shape of less than 2' by 2' size.

Ex. 11 (Hudson Decl.) ¶¶76-81.

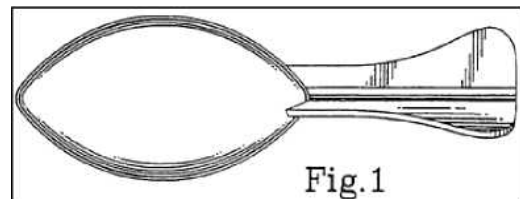
It is also why numerous prior art speakers and microphones for installation in ceiling grids—including ClearOne's own prior art patent—adopted the same shape and size, as shown in the below chart. *Id.*, ¶¶23-35, 76-80; *see also* U.S. Pat. No. 9,813,806 (the “806 Patent”) (Ex. 15) at 8:25-27, 8:40-44, Abstract (explaining that a square, ceiling-tile-sized microphone array blends into the décor and allows for inexpensive installation); U.S. Pat. Pub. No. 2012/0294472 (Ex. 16) at [0048] (same); U.S. Pat. No. 6,944,312 (Ex. 17) at 2:48-62 (same).

 <p>IPSCM Square Ceiling Tile Speaker</p>	 <p>Extron FF 220 Flat Field Speaker</p>	 <p>Valcom Spot SoundMasking Speaker</p>
 <p>Quam Lay-In Ceiling Mount Speaker</p>	 <p>ClearOne's U.S. Pat. No. 9,813,806</p>	 <p>AMK SQ Series Ceiling Speaker</p>
 <p>Extron ST 228 Speakers</p>	 <p>Armstrong i-Ceilings Sound Panel</p>	 <p>Lowell LT2 2x2 Loudspeaker</p>
 <p>U.S. Pat. No. 8,109,360</p>	 <p>Bogen Drop-In Ceiling Speaker</p>	 <p>U.S. Pat. No. 6,944,312</p>

Ex. 11 (Hudson Decl.) ¶¶23-75 (describing and providing more views of each device shown above).

Shure’s argument that the Sennheiser TC2 represents an alternative design, (*supra* p. 18), illustrates this point. While the face of the Sennheiser TC2 may appear visually different, Shure admits that that product, as well, “fits the ‘size and shape’ of a standard ceiling tile.” *Id.*; *see also* Ex. 18 (2018-10-24 Cerra Decl.) ¶31 (“In the flush mount configuration, the MXA910 can be installed in a ceiling grid in place of a ceiling tile, much like an air return duct cover or a light panel might replace a ceiling tile. This is the same manner as the Sennheiser TeamConnect . . .”).

Shure argues that the thin, square shape of the claimed design is not functional because array microphones can have other shapes. (*Supra* p. 18.) But the function of the claimed array microphone is not simply to be an array microphone. Rather, its function is to be an array microphone *that is mountable in a standard ceiling grid simply by replacing a standard ceiling tile.* In *OddzOn Prods., Inc. v. Just Toys, Inc.*, 122 F.3d 1396 (Fed. Cir. 1997), the Federal Circuit rejected a similar attempt by a patentee to over-simplify the function of the claimed design. In that case, the patentee argued that the “shape of a football with an arrow-like tail [as shown



in Figure 1 on the right] is an ornamental feature because ‘it is not required for a tossing ball.’” *Id.*

at 1406. The Federal Circuit rejected that argument, reasoning:

While ... there are many ways of designing ‘tossing balls,’ it is undisputed that the ball in question is specifically designed to be thrown like a football, yet travel farther than a traditional foam football. It is the football shape combined with fins on a tail that give the design these functional qualities. That tail and fins on OddzOn’s design add stability in the same manner as do the tail and fins found on darts or rockets. They are no less functional simply because “tossing balls” can be designed without them.

Id. Similar logic applies here. The thin, square shape of the claimed design is no less functional simply because microphone arrays can be designed otherwise; ceiling tile microphone arrays cannot be.

Shure also argues that “the Claimed Design does not require any particular mounting configuration (e.g., flush or otherwise mounted), and nor does Shure’s embodying product, the MXA910.” (*Supra* p. 19.) This is a reference to the fact that, while the embodying product can be installed simply by replacing a standard ceiling tile in a standard ceiling grid, it can also be installed in other ways. (*See id* at 2.) But the fact that the design can be installed in other ways does not mean that its thin, square shape is not functional. Indeed, even though the *OddzOn* tossing ball could be additionally used for bouncing, kicking, or short throws, its arrow-like tail remains functional for its primary use. *OddzOn*., 122 F.3d at 1406; *see also* Ex. 19 (2018-10-23 Wiggins Decl.) (admitting that one of the drivers of success for Shure’s embodying product was “the fact that it can be mounted flush with the ceiling, and in this way, it mimics a standard ceiling panel in a suspended ceiling system.”); Ex. 20 at 000913 (Shure’s customer interviews show that [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

Moreover, as explained by ClearOne’s expert, even if only one of the intended configurations is to install the array microphone in a standard ceiling grid, industry safety standards dictate the thin, square shape of that device. Ex. 11 (Hudson Decl.) ¶¶78-80. For example, a

product not shaped to completely replace a ceiling tile without gaps would allow heat and smoke from a fire in a space below that product to escape into the interstitial space above the drop ceiling. *Id.* ¶78. That would prevent heat and smoke from building up *below* the drop ceiling, which is where fire alarms and sprinklers are installed, and would thus prevent those fire alarms and sprinklers from activating when needed. *Id.* For that reason, a product not shaped to completely replace a ceiling tile without gaps would fail industry safety standards, product certification and, if installed, building inspection. *Id.*

Second, alternative designs would adversely affect the utility of the ceiling-tile array microphone. If they were to adopt another shape or size, none of the three ceiling-tile beamforming microphone arrays or prior art products shown above could be installed simply by replacing a standard ceiling tile in a standard ceiling grid, and likely would not pass fire and building safety codes and regulations. Ex. 11 (Hudson Decl.) ¶82; Ex. 10 (Delman Decl.) ¶81.

Third, Shure has a concomitant utility patent specifically claiming an array microphone supported by a housing sized and shaped to be mounted in place of a standard ceiling tile. Specifically, the '723 Patent purports to claim priority to the '493 Patent, which claims a housing for an array microphone that is "sized and shaped to be mountable in a drop ceiling in place of at least one of a plurality of ceiling tiles included in the drop ceiling, wherein a front face of the housing includes a sound-permeable screen having a size and shape that is substantially similar to at least one of the plurality of ceiling tiles." '493 Patent (Ex. 4) at Claim 17; *see also* Ex. 10 (Delman Decl.) ¶78 for other relevant claims of '493 Patent. "Whether that claim is valid or invalid, it concedes functionality of the [shape and size] and precludes a design patent on the same feature." *Cornucopia*, 2012 WL 3094955 at *6. Further, the specification of Shure's '493 Patent emphasizes the utility of the ceiling- tile shape of its invention. '493 Patent at 6:8-18 ("[T]he

housing 102 can have length and width dimensions that are substantially equivalent to the cell size of the grid forming the drop ceiling 600. In one embodiment, the housing 102 is substantially square-shaped with dimensions of approximately two feet by two feet (e.g., each of the side rails 112 is about 2 feet long), so that the housing 102 can replace any one of the ceiling tiles 604 in a standard U.S. drop ceiling.”).

Fourth, Shure’s advertising materials tout the utility of the ceiling-tile shape as allowing easy installation in a standard ceiling grid. *See, e.g.*, Ex. 22 (MXA910 User Manual) (“Ceiling Tile Mounting. The array microphone mounts directly in a ceiling tile grid. The microphone is available in two sizes, with an optional adapter kit also available to provide solutions for the most common ceiling tile sizes.”); Ex. 23 (Shure 2016-02-09 Press Release) (“the ability to flush-mount the Microflex Advance Ceiling Array alongside standard ceiling tiles”); Ex. 24 (Shure Microflex Advance Technical Certification Handbook) at SHURE268136-137 (“Installation -Installs flush in a drop-ceiling grid -609 x 609 mm (typical US) -600 x 600 mm (typical EMEA) -with adapter 625 x 625 mm[.]”).

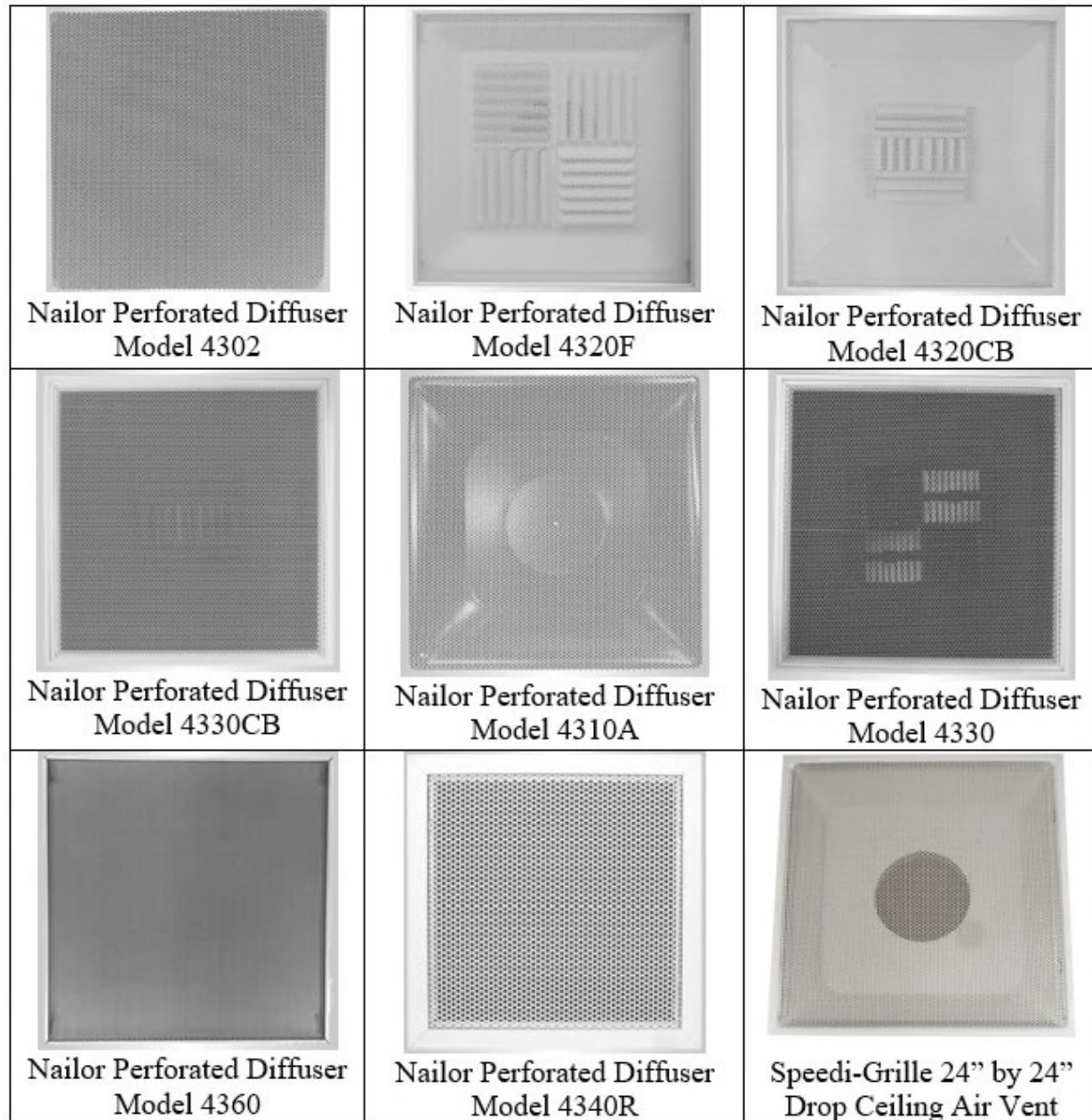
ClearOne’s advertising materials similarly highlight the fact that the ClearOne BMA CT product can be easily dropped into a standard ceiling tile grid. Ex. 25 (ClearOne BMA CT Brochure) (“Convenient Ceiling-Tile Form Factor + Drops easily into standard ceiling-tile grid systems.”). So do Sennheiser’s. Ex. 26 (Sennheiser TC2 Product Specification) (“The microphone array shall fit within the space of a standard 600 mm (2 ft.) ceiling panel and shall be mountable either onto or flush with the ceiling itself.”).

Simply put, design patent law does not grant Shure a monopoly on the thin, square shape of a standard ceiling tile. *See Richardson*, 597 F.3d at 1293-94 (holding that features such as having a “hammer-head” that “has to be flat on its end to effectively deliver force to the object being

struck” are functional and therefore the “district court here properly factored out the functional aspects of Richardson’s design as part of its claim construction”); *Cornucopia*, 2012 WL 3094955 at *7 (“The question here is whether Dyson can monopolize the look of a cylindrical form that is functional. The answer in general is no. The look of a cylinder is not arbitrary or decorative; it is the look of operation. Like everyone else, Dyson can monopolize in a design patent only an arbitrary shape.”). The *Berry Sterling* analysis establishes that having a thin, square shape is purely functional. Therefore, the thin, square shape should be excluded from the scope of the ’723 Patent.

b) The front face

The extent to which the front face of Shure’s design looks like prior art ceiling vents should also be excluded from claim scope. A sampling of such prior art vents is below.



Ex. 11 (Hudson Decl.) ¶¶ 56-75 (describing and providing more views of each device shown above). Shure modeled its claimed design after these vents. *See, e.g.*, Ex. 27 (Dep. Tr. of James Schanz, Shure's Vice President of Global Sales) at 21:17-20 ("[The MXA910] looked like an HVAC vent that sits in a drop ceiling."), 103:9-19 ("It's designed to sit – one configuration – into a drop ceiling, so it looks like, essentially an HVAC vent."), 105:10- 15 ("[The MXA910 and BMA CT] look like a drop-ceiling tile vent."); Ex. 28 (Dep. Tr. of Dr. Roy, Shure's Expert) at

143:18-144:11 (“I would, from my experience in architectural spaces, as a POSITA I would be normally expecting to see return air grilles which are also perforated plates. And so I would not be able to distinguish [the MXA910] from a return air grille.”); Ex. 14 (Decl. of Dr. LeBlanc, Shure’s Expert) (“[The MXA910] microphone array is a planar array on a circular substrate that is placed in an approximately 2’ by 2’ housing sized to align with the grid of a drop ceiling in the same manner as light fixtures, fan casings and other objects that are commonly packaged in ceilings.”).

Modeling the claimed design after prior art ceiling air vents served two functional purposes: (1) it allowed the device to blend invisibly into a ceiling by adopting the form of a known ceiling device; while (2) ensuring that the known form would serve the additional functional purpose of allowing sound to pass to the microphones inside the device. Ex. 10 (Delman Decl.) ¶80; Ex. 11 (Hudson Decl.) ¶¶87, 90. The *Berry Sterling* analysis confirms this.

Taking the first two *Berry Sterling* factors together, the form of a known ceiling air vent best serves the dual functional purposes of: (1) blending into a ceiling; and (2) allowing sound to pass through a front surface of the device. Ex. 10 (Delman Decl.) ¶80; Ex. 11 (Hudson Decl.) ¶¶87, 90; *see also* Ex. 29 (2020-05-13 Dep. Tr. of Patrick Oates) at 49:6-7 (“The design of the MXA910 is desired because it looks like the air return vent in a room”) This is shown by the fact that all but one of the speaker/microphone devices depicted in the above chart in Section III.E.i. take that form. Ex. 11 (Hudson Decl.) ¶55. Indeed, U.S. Pat. No. 8,109,360, addressed to a ceiling-tile loudspeaker assembly, specifically describes using a preexisting HVAC air diffuser grille for the front face. Ex. 30 at 10:25-31 (“[A] grille 201 and rear baffle 202 designed for heating, ventilation, and cooling (HVAC) applications can be utilized to aesthetically match standard drop ceilings, as it appears to match standard HVAC ceiling diffusers, and to avoid the need for design and manufacturing of a grille 201 and rear baffle 202 specifically for use in a loudspeaker assembly.”);

see also Ex. 11 (Hudson Decl.) ¶55. Shure and third-party statements regarding the Sennheiser device also confirm this point, by showing that, unlike the claimed design, the Sennheiser design does not achieve the functionality of blending into a ceiling. *See, e.g.*, Declaration of Chad Wiggins in support of Shure’s PI Motion (Ex. 31) ¶39 [REDACTED]

[REDACTED]

[REDACTED]

As to the third factor, Shure’s ’493 Patent specifically discusses and claims the “sound permeable screen” of the device, which “can have a perforated surface comprising a plurality of small openings,” and criticizes “obtrusive” prior art designs. ’493 Patent (Ex. 4) at 1:22-26; 5:19-25; Claim 17.

As to the fourth factor, Shure’s advertising emphasizes the fact that the MXA910 products blend into the visual of the ceiling. *See, e.g.*, Ex. 33 (2016 Shure Article) (“Achieve Invisible Audio with the MXA910 Ceiling Array Microphone”; “With the MXA910 Ceiling Array Microphone, Shure figured out how to make a great-sounding AV conferencing microphone invisible.”; “It goes on the ceiling, out of the way and pretty much out of site.”; “Fitting flush into a standard ceiling tile grid, the MXA910 is completely discreet and unassuming.”).

For the foregoing reasons, the extent to which the front face of Shure’s design looks like prior art ceiling vents should also be excluded from claim scope.

c) Other functional aspects of the claimed design

To the extent the Court considers it useful for claim construction to consider and discuss the functional aspects of other features of the claimed design, those are detailed in the attached declarations of Michael Hudson (Ex. 11), at ¶¶ 89, 91-92, and Joel Delman (Ex. 10), at ¶81.e.

6. Prior Art Must Be Considered in Defining Claim Scope.

The Federal Circuit has explained that it can be helpful to point out as part of claim construction “various features of the claimed design as they relate to the accused design and the prior art.” *See Egyptian Goddess, Inc.*, 543 F.3d at 680. In so doing, a court properly focuses the claim scope on the ways in which the claimed design is distinct from the prior art. Indeed, just this month the Federal Circuit explicitly approved a district court claim construction that:

considered the numerous prior art references ... all directed to the shape and design of a pencil. The district court thus recognized that “the overall appearance of Lanard’s design is distinct from this prior art only in the precise proportions of its various elements in relation to each other, the size and ornamentation of the ferrule, and the particular size and shape of the conical tapered end.”

Lanard II, 2020 WL 2478876, at *3 (citing *Lanard I*, 2019 WL 1304290, at *13). A similar analysis is appropriate here, where, as shown above, there is a large body of prior art directed to the shape and design of mechanical or electrical elements, such as air vents and speakers/microphones, that are designed to replace a ceiling tile in a standard ceiling tile grid. This is especially so where the claimed design intentionally mimics prior designs.

This Court’s claim construction should address and account for the prior art depicted above in Sections III.E.1 and III.E.2, because a design patent cannot be granted for one device made to look like another. “[T]he adaptation of old devices or forms to new purposes, however convenient, useful, or beautiful they may be in their new role, is not invention [A] person cannot be permitted to select an existing form, and simply put it to a new use, any more than he can be permitted to take a patent for the mere double use of a machine.” *Smith v. Whitman Saddle Co.*, 148 U.S. 674, 679 (1893) (quoted in *Lanard I*, 2019 WL 1304290, at *13); *see also Phoenix Knitting Works v. Hygienic Fleeced Underwear Co.*, 194 F. 703, 706 (E.D. Pa. 1911) (“[T]he mere transferring of an old design to a new and analogous use is not patentable design invention.”).

Accordingly, the appearance of prior art ceiling air vents and ceiling-tile speakers/microphones should feature in the Court's claim construction, in order to focus the claim construction on aspects of the claimed design distinct from prior art.⁵

7. The '723 Patent Is Directed to a Portion of the Housing of an Array Microphone, a Single Component of a Multicomponent Product.

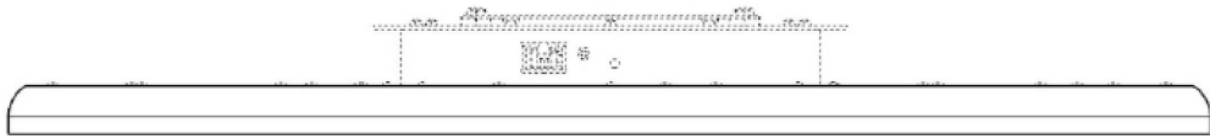
As a threshold matter, Shure's request that the Court determine the relevant article of manufacture at the claim construction phase is premature. This is a fact-intensive question, and discovery related to it is ongoing. ClearOne's position is that at the claim construction stage, the Court should decline to make a determination—without a complete record—that could lead to unconscionable damages at trial. *Bush & Lane Piano Co. v. Becker Bros.* (“*Piano I*”), 222 F. 904, 905 (2d Cir. 1915) (“If the rule be established that a design for a case enables the owner to collect damages for the case not only, but for the contents of the case as well, it will lead to results which shock the conscience.”).

If the Court is inclined to address the article of manufacture during claim construction, the '723 Patent is directed to only the portion of the housing claimed in the '723 Patent, not to the portions of the housing shown in broken lines or to the assorted electrical and mechanical components contained therein. It is certainly not directed to the electrical and mechanical components contained in an unclaimed housing that, in the product as sold, is attached to the back of the claimed housing. Ex. 10 (Delman Decl.) ¶¶90-91. For the purposes of this discussion, it is

⁵ The claim construction analysis of Shure's expert Mr. Hatch is flawed for numerous reasons, including because he did not consider either the '493 patent or the prior art. *See* Ex. 13 at 27:9-13 (“I did not rely upon the utility ['493] patent to understand what was in the ['723] design patent.”), 58:24-59:6 (“Q. ... So for the purposes of claim construction, did you look at prior art to evaluate what portions of this claimed design were novel and what were not? A. It was not part of my analysis and claim construction to study what was novel and what was not. It was not necessary in order to understand the figures.”).

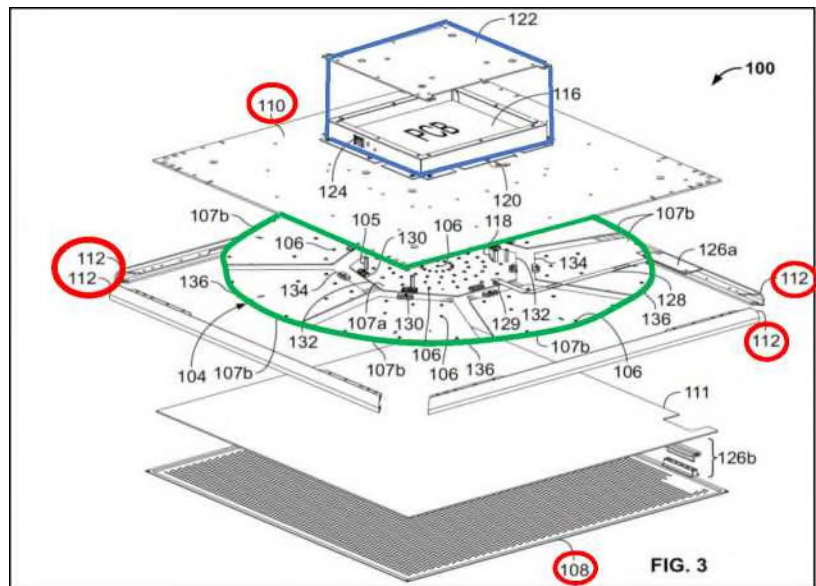
useful to review the '723 Patent, the '493 Patent to which it purports to claim priority, and the product as sold.

The '723 Patent recites “[t]he ornamental design for an array microphone assembly, as shown and described.” ’723 Patent at Cover Page. It depicts and claims, generally, a thin, square box with what appears to be a screen on the front. *Id.* The figures show another box attached to the back of the first, but that second box is presented in broken lines and therefore is specifically disclaimed:



'723 Patent Fig. 5. In the '493 Patent, the box that the '723 Patent disclaims is called the “control

box.” ’493 Patent (Ex. 4) at Fig. 2, 7:21-23. It houses a printed circuit board that is “electrically coupled” to what the ’493 Patent calls the “microphone array,” which is located inside the housing depicted in the ’723 Patent.⁶ The physical



relationship between these elements is shown in Figure 3 of the '493 Patent, shown below. What the '493 Patent calls the “microphone array” is outlined in green. The control box and associated PCB are outlined in blue. The elements depicted in the '723 Patent are circled in red. Tellingly,

⁶ The product as sold includes this control box. *See* Ex. 35 at 7.

everything depicted in solid lines in the '723 Patent is part of the "housing 102" '493 Patent, col. 5:14-37; *see also* Ex. 18 (2018-10-24 Cerra Decl.) ("The microphone array is encased within a housing 102 made up of a back support (110), ... side rails (112) and a screen (108)."). The '723 Patent discloses no designs whatsoever for the "microphone array 104," "microphones 106," or "substrate 107." What the '723 Patent depicts is a housing, not the electrical and/or mechanical components contained within, and certainly not those within another housing attached to it.

In its Opening Brief, Shure applies the four-factor test that the DOJ and USPTO set forth in an amicus brief filed in *Samsung*., attached hereto as Ex. 34 ("Gov. Br."). That test considers: (1) "the scope of the design claimed in the [] patent, including the drawing and written description"; (2) "the relative prominence of the design within the product as a whole"; (3) "whether the design is conceptually distinct from the product as a whole"; and (4) the "physical relationship between the patented design and the rest of the product." Gov. Br. at 27-29.⁷ Applying this test confirms ClearOne's position that the '723 Patent claims only the housing of an array microphone.

First, as shown above, the scope of the claimed design is directed to portions of the housing, not to the internal electrical and mechanical components of a complex, expensive product. See *Piano I*, 222 F. at 904-05 ("We are clearly of the opinion that ... giving the owner of a design patent [of] a receptacle intended to hold an expensive article of manufacture the profits made on the sale of the receptacle and its contents, must certainly lead to inequitable results and cannot be sustained."); Gov. Br. at 28 ("The inventor of a piano-case design, for instance, should not be able

⁷ Mr. Hatch's article of manufacture opinion lacks credibility because he failed to consider Shure's commercial embodiment in reaching his opinion that the claimed design is for a single component article of manufacture. Ex. 13 at 87:2-5 ("It was not part of the scope here to evaluate the embodiment of the claimed design."). Such an evaluation is clearly required by the DOJ/USPTO analysis upon which Shure relies.

to obtain profits on the piano as a whole simply by characterizing his invention as an ‘ornamental design for a piano.’”).

Second, the claimed design does not encapsulate the entire product as sold. To the contrary, it specifically disclaims significant portions of that product, including the control box and other features located on the back plate of the device. As the Government suggests, this factor should be considered with the next factor, which strongly favors a construction that the relevant article of manufacture is the housing only. *See* Gov. Br. at 28.

Third, the housing is conceptually different from the product as a whole. Gov. Br. at 28 (“*Third*, and relatedly, the factfinder should consider whether the design is conceptually distinct from the product as a whole.”). Shure’s own documents confirm this. For example, a Shure product roadmap document shows that [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] Shure’s customers have requested to purchase [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] The fact that Shure sells portions of the housing separately from any microphones, and

that customers want to purchase portions of the housing separately from any microphones, demonstrates that the housing is conceptually different from the product as a whole, which is high-end audio conferencing equipment that contains expensive electronics parts to perform complicated digital signal processing such as beamforming and acoustic echo cancellation. *See Piano I*, 222 F. at 903 (“We assume that the ‘case’ is nothing more than the structure which encloses and holds in position the piano proper, viz., the part which produces the music. The former appeals to the eye, the latter to the ear.”); *Bush & Lane Piano Co. v. Becker Bros.* (“*Piano II*”), 234 F. 79, 81-82 (2d. Cir. 1916) (noting that a “[book] binding and the printed record of thought respond to different concepts; they are different articles.”).

Fourth, the housing is physically separate from the rest of the device. *See* Gov. Br. at 29 (“*Fourth*, the physical relationship between the patented design and the rest of the product may reveal that the design adheres only to a component of the product.”); *Piano I*, 222 F. at 904 (“[T]he design is not for a piano but for a piano case—an ornamental decorated wooden box in which the piano is placed, but which may be and is sold separate and apart from the music-making apparatus.”). Shure teaches its customers that the claimed frame and grille are easily separated for painting—with “some basic disassembly” by removing “the six screws on each side” from the “main assembly” which contains the actual array of microphones and control box. *See* Ex. 40 (Shure Microflex Advance Training – How to Prepare MXA910 for Painting); *see also* Gov. Br. at 29 (“If the design pertains to a component that a user or seller can physically separate from the product as a whole, that fact suggests that the design has been applied to the component alone rather than to the complete product.”). With minimum effort, ClearOne’s expert Mr. Delman was able to separate the external housing from the rest of the MXA910. Ex. 10 (Delman Decl.) ¶92.

Moreover, Shure sells the frame and grille as replacement or accessory parts. See Gov. Br. at 29 (The fact that “the component can be sold separately (for instance, for replacement purposes)” suggests that the design has been applied to the component rather than to the complete product.).

[REDACTED]

For these reasons, if the Court is inclined to determine the article of manufacture to which Shure’s design patent is directed, it should be the housing of the array microphone and not the entire beamforming microphone array as sold.

D. Plaintiff’s Reply Position

1. Shure’s Construction is Consistent with the Federal Circuit’s Direction

Shure’s construction for the ’723 Patent relies on the patent’s figures and considers the claimed design as a whole. As explained in Shure’s Opening Brief, this is the approach repeatedly approved by the Federal Circuit. Although claim construction may identify aspects of the design that are dictated by function, as explained below, ClearOne has not set forth with specificity any aspect of the claimed design that is dictated by function such that a particular aspect of the design should be distinguished from the claimed design as a whole during claim construction.

2. ClearOne Has Abandoned Any Argument that the Claimed Design is Functional Under 35 U.S.C. § 171

In the Joint Claim Construction Chart, ClearOne provided in relevant part:

To the extent the claim can be construed, *the Court should determine that the overall size and shape of the claimed array microphone assembly design is functional* because, as the array microphone assembly is intended to replace a standard ceiling tile, the overall size and shape of the claimed array microphone assembly is dictated by the size and shape of a standard ceiling tile.

(D.I. 150) (emphasis added.)

ClearOne's construction was thus that the entire claimed design of the '723 patent was functional and presumably invalid under 35 U.S.C. § 171. (*Supra* pp. 13-14.) In its Responsive Brief, ClearOne abandoned this position. (*Supra* p. 32, n.5.)

3. ClearOne's Construction is Incomplete, and Factually and Legally Flawed

In its Responsive Brief, ClearOne now argues that there are three "functional aspects" of the claimed design (the "thin, square shape," the "front face," and "other functional aspects of the claimed design") that should be "excluded" from the claim scope. (*Supra* pp. 32-42.) Initially, "exclusion" from the claim design is not appropriate during claim construction, as a matter of law. In addition, ClearOne's proposed construction contains two errors—first, ClearOne does not clearly delineate the design aspects it deems as functional, and second, ClearOne has not established that any of these aspects are dictated by function.

a) ClearOne Does Not Discuss Ornamental Aspects of the Claimed Design and Its Construction Contravenes the Federal Circuit's Direction

Construction of a design patent requires more than merely identifying supposed functional aspects. It requires distinguishing between (1) ornamental aspects, (2) ornamental aspects of functional features, and (3) purely functional aspects of the claimed design. *Ethicon*, 796 F.3d at

1333; *Egyptian Goddess*, 543 F.3d at 680. While ClearOne has addressed those aspects of the claimed design it believes are functional and/or purely functional, ClearOne’s Responsive Brief is void as to any analysis of the ornamental aspects of the claimed design. Indeed, ClearOne’s expert readily testified that ornamentality was outside the scope of his opinion. (Ex. 45, Delman Dep., 153:23-154:18, 188:17-21, 192:17-21.) Having failed to consider ornamentality at all, ClearOne’s construction does not distinguish, as it must, between the ornamental and functional aspects of the claimed design. *OddzOn Prods., Inc.*, 122 F.3d at 1405 (“Where a design contains both functional and non-functional elements, the scope of the claim must be construed in order to identify the non-functional aspects of the design as shown in the patent.”)

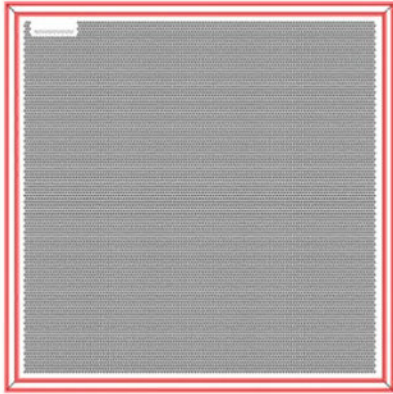
Ornamentality aside, ClearOne’s construction also fails to delineate, with specificity, which aspects of the claimed design are allegedly dictated by function. Indeed, ClearOne does not reference the figures of the claimed design even once in its Responsive Brief discussion of functionality, leaving its functionality arguments up to conjecture.

Inviting even greater legal error, ClearOne next asks the Court to “exclude” the vaguely delineated functional elements of the claimed design in its construction. As explained in Shure’s opening brief, this is not appropriate. *See Sport Dimension*, 820 F.3d at 1321-22; *Ethicon*, 796 F.3d at 1334. The Court should reject ClearOne’s legally erroneous approach.

b) The Purported “Thin, Square Shape” of the Claimed Design is Not Dictated by Function

ClearOne seeks to exclude the “thin, square shape” from the scope of the claimed design because it is purportedly “dictated by its functional purpose—to fit into a standard ceiling grid in place of a standard ceiling tile[.]” (*Supra* pp. 31-32.) But, ClearOne did not explain which aspects of the claimed design are included in its purported “thin, square shape.” Thus, it is unclear what portions of the claimed design ClearOne is advocating to have “excluded” from the claimed design.

To the extent ClearOne relies on Mr. Delman’s description during his deposition of the “thin, square shape” as reproduced below, ClearOne’s construction is critically lacking.



Annotated Fig. 3 showing Mr. Delman’s designated “square shape” (Delman Dep., 125:2-126:5; Ex. 5A)

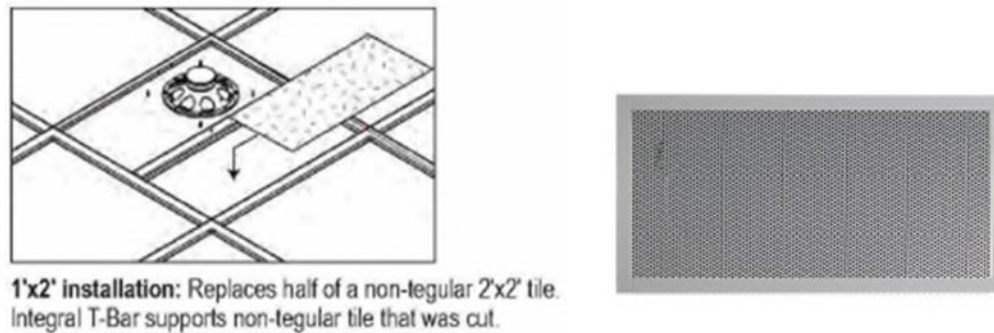


Annotated Fig. 5 showing Mr. Delman’s designated “thin” shape (Delman Dep., 132:5-134:8; Ex. 5B)

The “thin, square shape” encompasses nearly the entire claimed design. (Delman Dep., 125:9-14.) But it is error to construe a design patent to have “no scope” whatsoever, which ClearOne appears to invite the Court to do. *Ethicon*, 796 F.3d at 1334.

ClearOne’s proposed construction for “thin, square shape” separately fails because there exist alternative designs, which is “an important—if not dispositive—factor in evaluating the legal functionality of a claimed design.” *SZ DJI Tech. Co.*, 2019 WL 6840357, at *3. The record shows many alternative designs for ceiling-mountable microphones, including cylinders, rectangles, bulbs, and hexagons. (Ex. 46 (Decl. of Paul Hatch in Support of Plaintiffs’ Reply Brief, “Hatch Decl.”) ¶ 32.) Moreover, the Sennheiser TC2 is a microphone array sized and shaped to fit in a ceiling grid but has a different overall visual impression from, and is substantially “thicker”

than, the claimed design. (Ex. 7; *see also* Hatch Decl., ¶ 33.) Further, according to ClearOne’s own evidence, the prior art⁸ includes rectangular speakers, designed to replace a ceiling tile:



(Hudson Decl., Exs. 16 and 30.)

ClearOne’s other arguments as to the functionality of the “thin, square shape” of the claimed design are unavailing. First, ClearOne argues that the claimed design represents the “best design” because “it is the only design that allows an array microphone to be mounted in a standard ceiling grid simply by replacing a standard ceiling tile.” (*Supra* p. 32.) ClearOne cites the declarations of Messrs. Hudson, Delman, and LeBlanc stating that the *MXA910* (or “design” according to Mr. Delman) is shaped and sized to fit in a standard ceiling grid. (*Id.*) But the ’723 Patent *does not claim any measurements*, let alone those of the *MXA910*, and *does not claim mounting in a ceiling* and Mr. Delman agrees on both points. (Hatch Decl., ¶ 26; *see also* Delman Dep., 121:25-122:3, 128:1-129:6.) For the same reason, ClearOne’s argument that the claimed design is the “best” design because prior art designs have “adopted the same shape and size” also fails. (*Supra* p. 33.) Moreover, the “shapes” of the prior art designs cited by ClearOne, when considered holistically, do not share a similar “thin” aspect with the claimed design. (Hatch Decl., ¶ 31.) Finally, ClearOne cites cases to support its argument that the claimed design is the “best”

⁸ Contrary to design law, ClearOne’s experts each limited their analysis to discrete elements of the prior references as opposed to the designs as a whole—undercutting the comprehensiveness of their analysis. (Ex. 47, Hudson Dep., 101:17-102:17; Delman Dep., 141:18-142:4.)

design for the purported function of replacing a ceiling tile. (*Supra* p. 32.) But in those cases, no alternative design would allow the article of manufacture to function consistent with the purpose or function normally associated with the article of manufacture. *See, e.g., Best Lock*, 94 F.3d at 1566 (finding the key blade design (not the entire key) was “dictated solely by the key blade’s function” where a key blade with a different design would necessarily fail because no alternative blank key blade would fit the corresponding lock”); *Static Control*, 697 F.3d at 422 (finding the printer cartridge design was “dictated solely by the printer with which they are compatible” where the cartridge appearance “had no other role” than compatibility); *Carletti*, 328 F.2d at 1022 (finding the gasket design which was designed to pass tests for a standardized specification as opposed to ornamental considerations was functional); *Cornucopia*, 2012 WL 3094955 at *6 (finding that only a circular nozzle would “achieve the sort of air discharge pattern and effectiveness *normally associated with a table fan*”). Ceiling mounted microphones, even those designed to replace a ceiling tile, come in many shapes.

Here, the article of manufacture is an array microphone assembly. (Ex. 1.) The function associated with this article of manufacture is to operate as a microphone ordinarily does—that is *receiving and transmitting sound*. (Ex. 6, ¶ 29; *see also* Hudson Dep., 66:13-19.) ClearOne’s entire functionality argument as to the “thin, square shape” rests on the assumption that the function of an array microphone assembly is *to replace a ceiling tile*. (*Supra* pp. 32-39.) However, ClearOne has not cited, as it cannot, any support in the ’723 Patent for this assumption. Moreover, ClearOne cannot establish that the *normal* functionality of an array microphone assembly is to replace a ceiling tile.

Underscoring the lack of functionality, the claimed design is not specific to any mounting configuration. (Hatch Decl., ¶ 27.) Even analyzing the functionality of an array microphone

assembly in terms of mounting capabilities, there are varied mounting options for microphones generally (e.g., post, wall, below ceiling, suspended, flush, table, stand) and varied options for allegedly “thin, square shape” microphones like the MXA910 and the Sennheiser TC2 (e.g., below ceiling, suspended, flush, and wall). With the many mounting options, ClearOne cannot establish that “replacing a ceiling tile” would be the *normal* functionality associated with the claimed design.

ClearOne’s reliance on *OddzOn*. is equally misplaced. The Federal Circuit in *OddzOn* concluded that while the “tail and fins” of the claimed design were functional in that they “add[ed] stability” to the claimed ball, these elements “d[id] not invalidate the design patent” and the court did not exclude them from the scope of the claim. 122 F.3d at 1406. Rather, the Federal Circuit “agree[d] with the district court’s claim construction, which properly limit[ed] the scope of the patent to its overall ornamental [“rocket-like”] visual impression, rather than to the broader general design concept of a rocket-like tossing ball.” *Id.* at 1405.

ClearOne’s remaining arguments as to the functionality of the “thin, square shape” of the claimed design also fail. First, ClearOne argues that the “thin, square shape” is “dictate[d]” by industry safety standards to “pass” fire and building safety codes and regulations. (*Supra* p. 36-37.) But as explained by ClearOne’s expert, objects smaller than 2’ x 2’ (including smoke detectors, security systems, and microphones) can be installed in a ceiling and satisfy these safety requirements. (Hudson Dep. 137:10-139:13.)

Second, to support its contention that Shure’s utility patent shows the functionality of the “thin, square shape,” because it claims “an array microphone supported by a housing sized and shaped to be mounted in place of a standard ceiling tile” (*Supra* p. 37), ClearOne cherry-picks the utility disclosure. The ’493 Patent discloses post-mounted, drop-mounted, and/or wall mounted configurations for the array microphone assembly. (U.S. Pat. No. 9,565,493 col. 7, lines 10-20.)

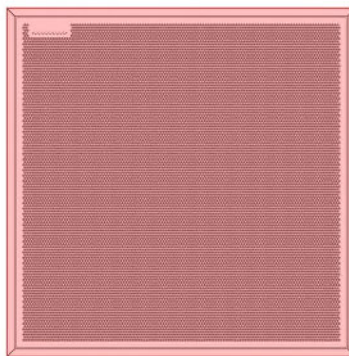
Finally, ClearOne cites Shure's advertising materials that purportedly "tout the utility of the ceiling-tile shape as allowing easy installation in a standard ceiling grid." (*Supra* p. 38.) While Shure has illustrated this feature (as to MXA910 products, and not with the claimed design), it has also released promotional materials touting the various other mounting capabilities of the MXA910. (Ex. 48.)

ClearOne has failed to establish that the "thin, square shape" of the claimed design is dictated by function. To the extent the scope of the claimed design is limited, it should be limited to the overall ornamental visual impression as shown and described in the '723 Patent.

c) The Scope of the Purported "Front Face" of the Claimed Design is Not Limited by HVAC Vent Prior Art

ClearOne seeks to exclude the "front face" from the scope of the claimed design "the extent to which . . . it looks like prior art ceiling vents." (*Supra* p. 42.) As explained further below, ClearOne's arguments are again factually and legally flawed.

As an initial matter, ClearOne has not indicated which aspects of the claimed design are included in its purported "front face." Mr. Delman described the "front face" during his deposition as shown below:



Annotated Fig. 3 showing Mr. Delman's designated "front face"
(Delman Dep., 137:8-138:18; Ex. 5C)

ClearOne argues that “[m]odeling the claimed design after prior art ceiling air vents served two functional purposes: (1) it allowed the device to blend invisibly into a ceiling by adopting the form of a known ceiling device⁹; while (2) ensuring that the known form would serve the additional functional purpose of allowing sound to pass to the microphones inside the device.” (*Supra* p. 41.) ClearOne cites statements of James Schanz (Shure’s Vice President of Global Sales), Dr. Kenneth P. Roy (an expert on ceiling tiles), and Dr. LeBlanc (an expert on audio signal processing) for the notion that the claimed design was “modeled” after air vents. (*Id.*). But none were involved in the conception of the claimed design—all of these comments post-date conception by many years. Indeed, the claimed design was inspired in part by the architecture of Shure’s own building in Niles, Illinois that includes exterior tiles with perforation patterns with a frame, suggesting a sleek, industrial look and feel, not an HVAC vent. (Ex. 49 at 15 (Resp. to Rog. No. 17); *see also* Ex. 50 (Decl. of Ira Weinstein, “Weinstein Decl.”), ¶¶ 40-41 (“I am not aware of any end-user organizations purchasing AV equipment, such as ceiling mic arrays, because those AV devices would likely be mistaken for a ceiling tile, HVAC fixture / vent, or some other ceiling-mounted device or appliance”).)

In this regard, ClearOne’s reference to a “standard HVAC vent” is a misnomer. There are many HVAC vents (e.g., exhaust, supply, distribution, circulation, etc.) which are available in almost any shape (e.g., square, circular, tetrahedron, hexagon, and obelisk) and can look considerably different. (Hudson Dep., 45:16-48:8, 48:21-49:13.) Thus, any statement as to HVAC vents, standard or otherwise, is generally meaningless. (Hudson Dep., 50:16-22 (Q: If I were to

⁹ To the extent ClearOne puts forth an aesthetic functionality argument, the Federal Circuit has held that this trademark doctrine is inapplicable to design law. *Auto. Body Parts*, 930 F.3d at 1320 (“The considerations that drive the aesthetic functionality doctrine of trademark law simply do not apply to design patents.”). Moreover, there was no desire to make the Shure design look like an HVAC unit. (Ex. 50, Weinstein Decl., ¶¶ 40-41; Ex. 49 at 15 (Resp. to Rog. No. 17).)

ask you to describe a standard HVAC vent, would you be able to do that? A: You would have to be specific on the type of vent and the application in which it's going into.”)

Further, while the perforation pattern on the “front face” involved some acoustic considerations, the actual design of the perforations was mainly aesthetic in nature and with substantially more perforations than what was needed acoustically. (Ex. 49 at 14 (Resp. to Rog. No. 17).) For example, at the four corners of the perforated screen, there are no microphones and thus no functional need for perforations. (*Id.*). Thus, the exact design of the perforations claimed in the '723 Patent was not dictated by function. (Hatch Decl., ¶¶ 38-39). For the foregoing reasons, ClearOne's arguments as to the functionality of the “front face” are factually flawed.

ClearOne's reference to HVAC prior art also fails as a matter of the ordinary observer test. The Federal Circuit has noted that a hallmark of this test is the idea that the hypothetical ordinary observer is deemed to be familiar with the prior art. But not all prior art is relevant, because the purpose of this background prior art is to provide a frame of reference for the ordinary observer test. *Egyptian Goddess*, 543 F.3d at 677. Likewise, to the extent that prior art has any role in claim construction, as ClearOne contends, the Court should focus on the prior art that is familiar to the ordinary observer, because that is the art that would be part of the ordinary observer's frame of reference during the infringement analysis.¹⁰

Using ClearOne's definition of the ordinary observer, an AV specialist, such a person would be “well familiar with installed *audio* conferencing equipment” like speakers and microphones. (*Supra* p. 24 (emphasis added).) But this person would not be familiar with HVAC

¹⁰ ClearOne relies on *Lanard II*, 2020 WL 2478876, at *3. In *Lanard II*, the court noted that both claimed design and the accused product were designed to look like a No. 2 pencils. *Id.* at *15. While ClearOne has alleged that Shure mimicked a “standard HVAC vent” in designing the claimed design, the evidence from the inventors shows that is not the case. Ex. 49 at 15 (Resp. to Rog. No. 17).

vents. (Hudson Dep., 210:25, 211:1-5 (Q: And in your experience, are specialized intermediary in the audio visual market such as distributors, integrators and installers also involved in buying . . . HVAC units or HVAC systems? A: Not [unless] they work two jobs.)) Nonetheless, ClearOne classifies “ceiling vents” as prior art for an array microphone assembly. (*Supra* p. 42.) This is contrary to purpose of viewing the designs from the perspective of the ordinary observer. Moreover, the true appearance of the HVAC vents ClearOne cites in its brief is unknown. Mr. Hudson testified that, in his experience, the photos of diffusers included in his report had been *altered* by the manufacturers and did *not* represent the true appearance of the products. (Hudson Dep., 103:1-104:23.) Mr. Delman did not analyze the products in person and relied on Mr. Hudson’s photos in his opinion. (Delman Dep., 141:18-21). For these reasons, HVAC vent prior art should not be used to limit the scope of the claimed design.¹¹

4. ClearOne Fails to Show That the Claimed Design is Indefinite by Clear and Convincing Evidence

In analyzing indefiniteness, the central question under 35 U.S.C. § 112 is whether “the disclosure [of the application drawings and specification] sufficiently describes the design.” *In re Maatita*, 900 F.3d 1369, 1376 (Fed. Cir. 2018). “The purpose of § 112’s definiteness requirement . . . is to ensure that the disclosure is clear enough to give potential competitors (who are skilled in the art) notice of what design is claimed—and therefore what would infringe.” *Id.* Because “the

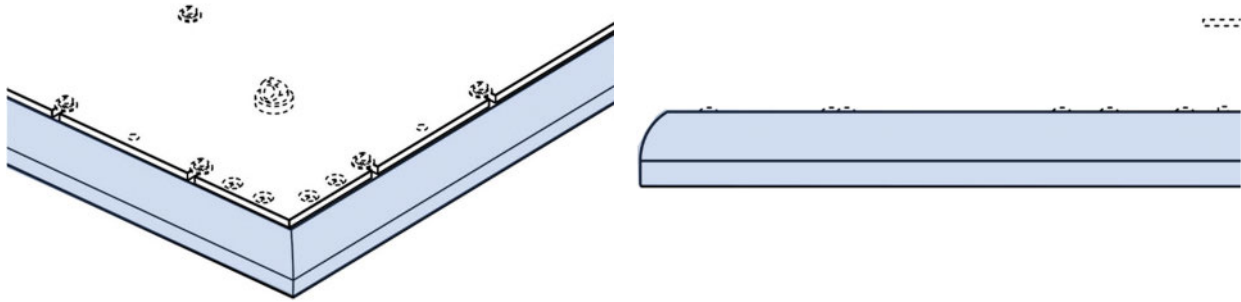
¹¹ ClearOne references “other functional aspects” of the Claimed Design in its Answering Brief. (Br. at 23.) But ClearOne chose not to address these “other functional aspects” in its brief, instead citing the declarations of Messrs. Hudson and Delman. (*Id.*) Shure objects to any ancillary functional argument excluded from ClearOne’s Answering Brief as an attempt to circumvent the Court’s page limits. Nevertheless, upon cross examination, neither declarant committed to any additional aspects of the design as being “functional.” (Delman Dep., 194:4-197:6; Hudson Dep., 156:10-20.)

purpose of indefiniteness is to give notice of what would infringe[.]” indefiniteness is assessed by one skilled in the art “from the perspective of an ordinary observer.” *Id.* at 1377.

A claim may be indefinite “if it includes multiple, internally inconsistent drawings.” *Id.* at 1375. That said, an indefiniteness analysis does not end once an inconsistency is identified. Indeed, “if they ‘do not preclude the overall understanding of the drawing as a whole[.]’” “[e]rrors and inconsistencies between drawings do not merit a § 112 rejection[.]” *Id.* at 1376 (citing *Asano*, 201 U.S.P.Q. at 317).

ClearOne argues that the claimed design is indefinite because “a POSITA, viewing the ’723 Patent either from her own perspective or that of an ordinary observer, would not know with reasonable certainty whether Figure 2 or Figure 4 shows the claimed design[.]” (*Supra* p. 31.) Specifically, ClearOne argues that the presence of “16 slots” depicted in Figure 2 but not Figure 4 results in a “significant difference” “in light of the plain appearance of the backside of the design.” (*Id.* at 26.) Thus, according to ClearOne, the claimed design “fails to enable a designer of ordinary skill in the art to create one of most prominent[sic] features of the claimed design—the outline for the back panel.” (*Id.* at 27 (emphasis added) (citing Delman Decl., ¶ 76).) ClearOne’s arguments are here again factually and legally flawed.

ClearOne’s claim that the “16 slots” is one of the most prominent features of the claimed design is questionable at best. As an initial matter, the “16 slots” are not found at the “perimeter” or outline of the Claim Design. (Hatch Decl., ¶¶ 13-14; Delman Dep., 163:6-164:24, Ex. 5D (agreeing).) Rather, as shown below, the “16 slots” are inset from the claimed design’s perimeter and, in fact, would not be seen from, nor affect the appearance of the claimed design’s perimeter as depicted in Figures 5 and 6: (*Id.*)



Enlarged and Annotated Fig. 2

Enlarged and Annotated Fig. 5; *see also* Fig. 6

By ClearOne's own admission, there exists "a series of nested squares with mitered corners" (*Supra* p. 26), which sit between the claimed design's perimeter and the placement of the "16 slots." (*See* Hatch Decl., ¶ 13-14.) This is far from a prominent design element considering the design as a whole. [REDACTED]

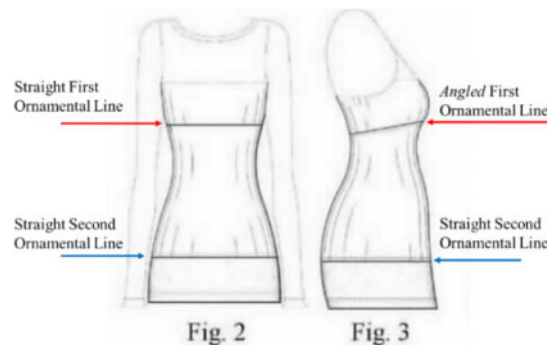
[REDACTED]

[REDACTED] Shure's industry expert, Ira Weinstein, shares that view. (Ex. 50, Weinstein Decl.)

ClearOne's arguments are also legally flawed. As discussed above, the proper indefiniteness standard is to consider whether the difference between Figures 2 and 4 of the claimed design "preclude[s] the overall understanding of the drawing as a whole." *Maatita*, 900 F.3d at 1376. By focusing on the "16 slots" and limiting its indefiniteness analysis to only two out of the six figures of the claimed design (*Supra* pp. 26-27), ClearOne fails to apply the proper indefiniteness standard. For this reason, ClearOne's reliance on *Spanx* and *Masonite* is misplaced. While the courts in those cases ultimately found that the claimed designs at issue were indefinite, they did so evaluating inconsistencies as they pertained to the *design as a whole*. When

considering *Spanx* and *Masonite* in this context, as opposed to ClearOne’s narrowly drawn conclusions regarding the same¹², these cases are readily distinguishable.

For example, in *Spanx* the Southern District of New York evaluated indefiniteness as to a claim for a garment. 2014 WL 1688130, at *1. As the court explained, the claimed design was comprised of *only two* ornamental features—that is, two horizontal lines (one below the bust, and a second around the hip). *Id.* at 7. The first horizontal line was shown as straight in some figures and angled in others. *Id.* Given the first ornamental line was inconsistent “as to [its] shape and position” between the figures, the court held that “replacing the straight line with the angled line or vice-versa would materially alter the subject matter” of the claimed design. *Id.* (internal quotations and citation omitted). Thus, the court held that the inconsistency met the “standard” for indefiniteness—that is it was “material and of such magnitude that the *overall appearance* of the design [was] unclear.” *Id.* (emphasis added) (internal quotations and citations omitted).



Annotated Fig. 2 and Annotated Fig. 3 from *Spanx*

Here, ClearOne fails to articulate how the difference between the “16 slots” depicted in Figure 2 but not Figure 4 is “material and of such a magnitude” to render the overall appearance

¹² ClearOne cites *Masonite* and *Spanx* for the contention that the Claimed Design is indefinite because it does not fall into one of two exceptions to indefiniteness: “(1) multiple views of a patent were consistent, with only one view being inconsistent; or (2) for an inconsistency between two figures, one of the figures was less clear as to the feature in question.” (Answering Br. at 8-9.) *Maatita* does not limit the indefiniteness analysis to just two such “exceptions.”

of the claimed design unclear. *Id.* Unlike the inconsistency in *Spanx* which affected a “fundamental” component of the design (*id.*), the difference in the claimed design affects only the bottom of the claimed design, it has no impact on the top, front, rear, or sides of the design. (Hatch Decl., ¶¶ 7-21.) Sidestepping this issue, ClearOne attempts to elevate the “prominence” of the “16 slots” but this contention only rests on the declaration of its expert. (*Supra* pp. 26-27.) And even Mr. Delman’s opinion in this regard is based, in part, on his misapprehension that the “16 slots” are on the perimeter of the design. (Delman Dep., 182:8-14; Hatch Decl., ¶¶ 13-14.) That is not the case. Because the “16 slots” are not at the perimeter of the claimed design as explained above they do not affect the shape of the overall design like the inconsistency in *Spanx*.

Similarly, in *Masonite* the Northern District of Illinois evaluated indefiniteness as to the claimed designs for a cabinet door facing. 2011 WL 13327344, at *4-7. In that case, one figure depicted five contour lines at the upper and lower decorative trim of the design while another figure depicted four and six contour lines at the upper and lower trims, respectively. *Id.* at *5. Given the patent contained only two, inconsistent figures, the court concluded that the inconsistencies would force a POSITA to “guess” as to the scope of the claimed design and granted summary judgment in favor of the defendant. *Id.* at *4-7. Here, like in *Masonite*, the subject differences are found between only two figures. (Hatch Decl., ¶ 10.) But *unlike* the inconsistencies in *Masonite* that affected the entirety of the claimed design as depicted by only two figures, the differences between Figures 2 and 4 of the claimed design affect only the bottom of the claimed design, and not the design as a whole. (*Id.*, ¶ 41.) For this reason, ClearOne’s argument that the “drawings in Figures 2 and 4 [of the claimed design] contain even fewer features than the commercial door facings in *Masonite*” (*Supra* p. 31), is unavailing as it ignores, without

explanation, the ornamental features of the claimed design as shown in Figures 1, 3, 5, and 6 of the '723 Patent.

When viewed in the context of the overall appearance of the claimed design, the differences between Figures 2 and 4 are more akin to the inconsistencies evaluated in *Deckers*, *Sears*, and *Asano*—in which courts found the design not indefinite, despite numerous inconsistencies.

In *Deckers*, the district court evaluated indefiniteness as to various design patents for the ornamental design for footwear. 2016 WL 7017219 at *7. The court evaluated the differences between the figures in one embodiment, noting that Figure 6 depicts hatch drawings going around the entirety of the “top lip” of the design while Figure 1 did not, e.g.: (*Id.* at *7.)

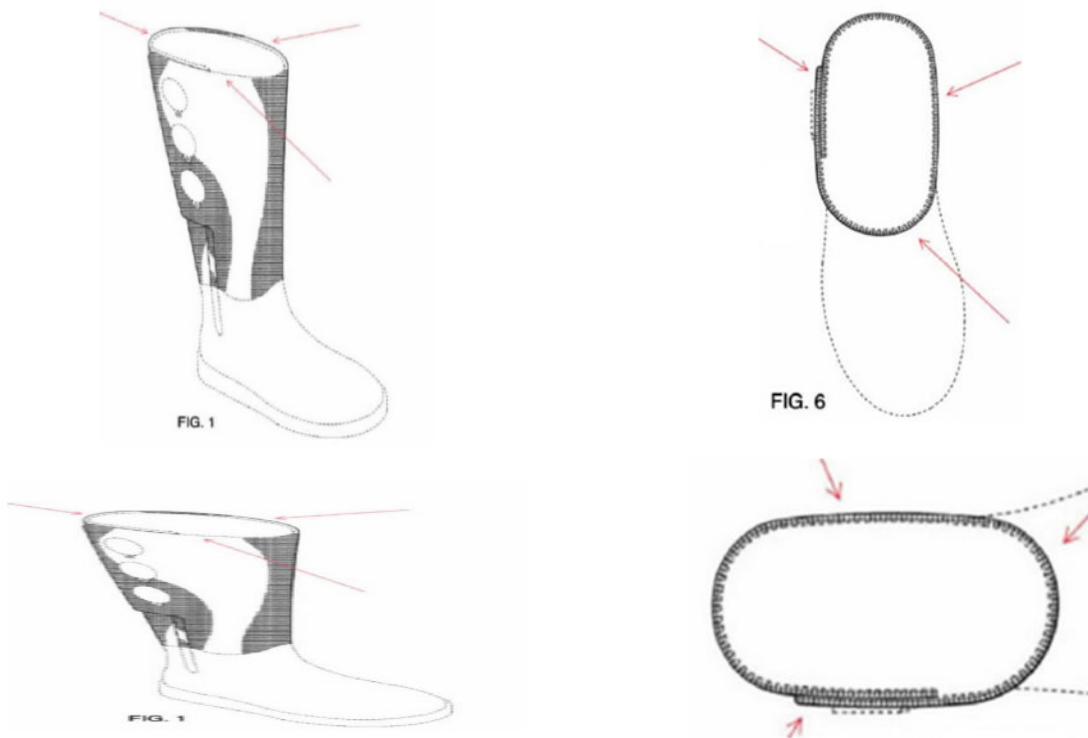


Fig. 1 and Fig. 6 (enlarged) (both Annotated in the original)

Given there was “no appreciable difference between the patterns between the various drawings,” the court concluded, that “[w]hile Fig. 6 appears to depict hatch drawings on the top lip of the boot that do not appear in the other drawings (e.g., Fig. 1), this alone d[id] not render the *overall*

appearance of the claimed design uncertain.” *Id.* (emphasis added). Here, just as in *Deckers*, the “16 slots” in Figure 2 that do not appear in Figure 4 do not *alone* “render the overall appearance of the claimed design uncertain.” *Id.* Indeed, ClearOne has not, as it cannot, explain how the “16 slots” affect the overall appearance of the design. Just as the court in *Deckers* found no appreciable difference in patterns between the figures (*Deckers*, 2016 WL 7017219 at *7), here there exists no appreciable difference between the ornamental features. Notwithstanding the slot differences, the overall appearance of the claimed design—as shown and described in the Figures—remains clear.¹³

Similarly, in *Weber-Stephen Prods LLC v. Sears Holding Corp.*, the district court evaluated a patented design for a grill. No. 13 C 01686, 2015 WL 9304343 at *18-19 (N.D. Ill. Dec. 22, 2015). The defendant identified four inconsistencies in the drawings, one being a “narrow band” depicted at the bottom of the grill in Figure 4 that was not depicted in Figure 1 as shown below.

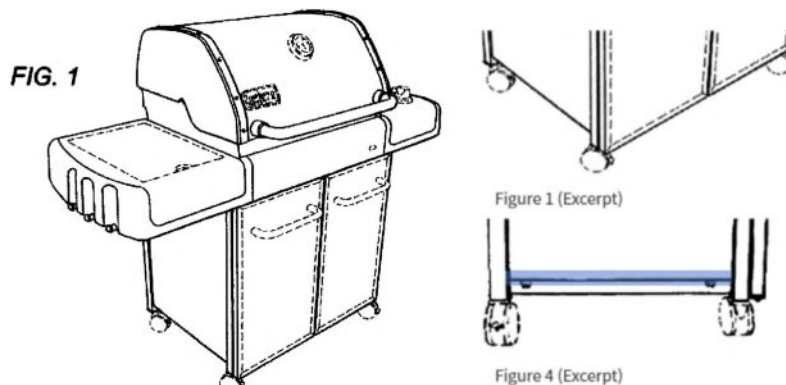


Figure 1 and Annotated Figure 4

¹³ ClearOne argues that this case is indistinguishable because “neither Figure 2 nor Figure 4 presents an obscured or unclear view of the relevant part of the back panel.” (Br. at 11). While the court in *Deckers*, as to the ’999 Patent, provided that “a reasonable boot designer, in deciding whether the claimed design includes a notch, would look to the drawings that provide the clearer—not the more obscured—view of that part of the boot” (*Deckers*, 2016 WL 7017219 at *4), it did not apply this analysis as to the ’650 Patent (*Id.* at *7).

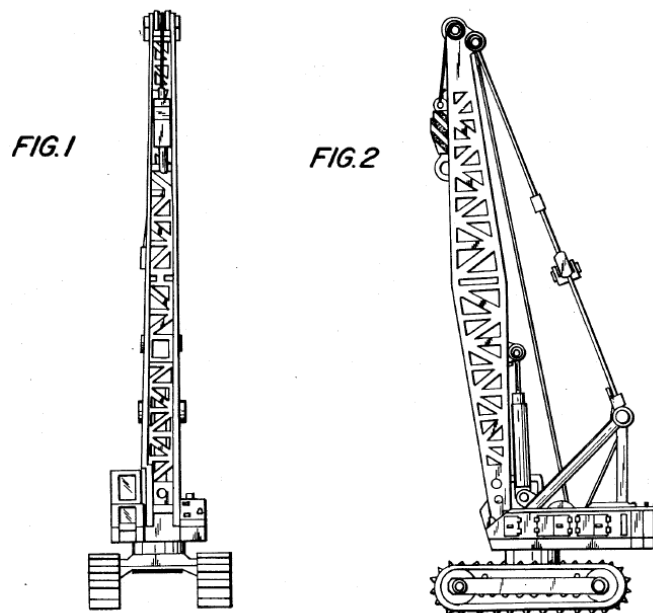
The court found that a reasonable jury would find this and the other inconsistencies “are not of such magnitude that the overall appearance of the design is unclear” for three reasons. *Id.* at 19. First, the court concluded this was “a battle of the experts” and it could not resolve the conflict as to indefiniteness in the expert testimony on summary judgment. *Id.* Second, the court distinguished *Weber* from *Spanx*. *Id.* The court in *Weber* noted that the inconsistency in *Spanx* “was important” because it pertained to the “first ornamental line—one of only two—[and was] a fundamental part of the claimed design.” *Id.* (internal quotations and citation omitted). The court in *Weber* found the facts in *Spanx* to be distinguishable concluding it was “not as obvious that the narrow band . . . [was] fundamental to the *overall design*.” *Id.* (emphasis added). Third, the court cited to the presumption of validity and defendant’s failure to show indefiniteness by “clear and convincing evidence.” *Id.* at 19. Concluding that defendant “needed to show not only that the inconsistencies were there, but also that they were material enough to invalidate the patent” and as to the latter, defendant’s “evidence d[id] not so overwhelm the [plaintiff’s expert] declaration[,]” the court denied defendant’s motion for summary judgment as to invalidity. Like in *Weber* where the inconsistency of the narrow band affected only the left and right side of the design, the differences here affect only a portion of the claimed design. Similarly, the feature of the “16 slots” just as the narrow band in *Weber*, is but one of many ornamental elements of the claimed design. Thus, just as in *Weber*, it is not *obvious* that the feature of the “16 slots” is fundamental to the overall design to support a finding of invalidity.

Finally, in *Ex Parte Asano*, the Board of Patent Appeals and Interferences considered the indefiniteness of a design patent for a toy as shown below. 201 U.S.P.Q. 315 (B.P.A.I. 1978). The examiner identified over 18 inconsistencies between the figures, including:

- “The boom support coupling shown in Figure 2 is not illustrated in Figure 1.”

- “The box-like structure at the base of the pivot connecting the boom to the hydraulic cylinder shown in Figure 2 does not appear in Figure 3.”
- “The reel-like structure on the vehicle body connected to the boom attachment cable in Figure 2 is not shown in Figure 3.”
- “The stacks shown in Figures 2 and 3 are not shown in Figure 5.”
- “The forward line of the vehicle body adjacent the cab is not shown in Figure 5.”

Asano, 201 U.S.P.Q. at 318.



Ex. 52 U.S. Pat. No. D252,231, Sheet 1 of 3, Fig. 1 and Fig 2

Concluding that Section 112 does not require “blueprint type drawings of an exact scale[,]” the Board held that “[m]echanical drawing errors and inconsistencies between the figures of the drawing, which do not preclude the overall understanding of the drawing as a whole are an insufficient basis for holding the design both indefinite and insufficiently disclosed under 35 USC 112.” *Asano*, 201 U.S.P.Q. at 317 Thus, having found that the “the original drawings are sufficiently precise here to *reasonably* appraise one skilled in the art [] the *metes and bounds* of the invention[,]” the Board found the claim was definite and the errors were “inconsequential and

[did] not singly or in toto constitute errors which [were] sufficient to support a rejection under 35 USC 112.” *Id.* at 318.

Here, just as in *Asano*, the claimed design is sufficiently precise to reasonably appraise a POSITA of what is claimed. *Id.* Indeed, while the claimed design in *Asano* had at least five discrete design features present in one figure and missing from another, the claimed design has just one, the “16 slots.” (*See generally Ex. 1.*) Just as the claimed design in *Asano* was found to sufficiently define “metes and bounds” of design (notwithstanding numerous inconsistencies), so too does the claimed design here.

ClearOne’s attempt to distinguish *Asano* is unpersuasive. ClearOne argues that the “Board emphasized” that the design in *Asano* was “directed to a toy[.]” (*Supra* p. 30.) Leaving the rest of its argument to conjecture, to the extent ClearOne argues that the standard for indefiniteness is somehow different for designs directed to toys than other articles of manufacture, ClearOne has provided no legal basis for its position. ClearOne also states that the “Board emphasized” that the design in *Asano* contained “extreme detail” as compared to the claimed design and the design in *Masonite*. (*Id.*) While that may be so, such a high level of detail is not required to render an inconsistency insufficient to invalidate a design patent. As discussed above in *Deckers* and *Sears*, far less detailed designs have survived indefiniteness challenges.^{14, 15}

¹⁴ ClearOne cites Mr. Delman’s declaration for the proposition that the differences between Figures 2 and 4 of the Claimed Design were not mechanical drawing errors because “there are generally no ‘errors’ in CAD drawings.” (*Supra* p. 39.) ClearOne’s argument contradicts Mr. Delman’s deposition testimony that he has “no way to know exactly what happened between the generation of Figure 2 and Figure 4. . . There’s a variety of potential explanations.” (Delman Dep. (172:7-10). *See also* (Hatch Decl.¶ 16.)

¹⁵ ClearOne argues that it is premature for the Court to determine the relevant article of manufacture at the claim construction phase. (Answering Br. at 24.) Shure agrees that resolving this issue at this stage is premature and reserves its right to address ClearOne’s arguments on this issue at a later time.

E. Defendant's Sur-Reply Position

1. Functional Aspects of the '723 Patent Must Be Excluded from Claim Scope.

Shure's Reply argues that construction of a design patent requires "distinguishing between (1) ornamental aspects, (2) ornamental aspects of functional features, and (3) purely functional aspects of the claimed design." (*Supra* p. 50.) Shure's proposed construction does none of this. Instead, Shure's construction merely points to the figures of the '723 Patent, ignoring clear Federal Circuit guidance that "a trial court can usefully guide the finder of fact by addressing a number of other issues that bear on the scope of the claim [such as] distinguishing between those features of the claimed design that are ornamental and those that are purely functional . . ." *Egyptian Goddess*, 543 F.3d at 680.

Despite offering no guidance in its own proposed construction on the aspects of the design that are functional versus ornamental, Shure criticizes ClearOne for not doing enough. But ClearOne has clearly delineated at least two purely functional aspects of the claimed design: (1) the thin, square shape¹⁶; and (2) the HVAC appearance of the front face. Had Shure thought that further delineation of the ornamental aspects of the design would be helpful to the jury, Shure could have and should have described those.

Shure argues that ClearOne improperly requests that the functional aspects of the claimed design be excluded from claim scope. (*Supra* p. 51 (citing *Sport Dimension*, 820 F.3d at 1321-22; *Ethicon*, 796 F.3d at 1334).) There is nothing inappropriate about this request. Indeed, in *Richardson*, 597 F.3d at 1293-94, the Federal Circuit held that a district court "properly factored out the functional aspects of Richardson's design as part of its claim construction," making clear

¹⁶ This is what is meant by ClearOne's proposal, in the Joint Claim Construction Chart, that the "overall size and shape of the claimed array microphone assembly design is functional because, as the array microphone assembly is intended to replace a standard ceiling tile, the overall size and shape of the claimed array microphone assembly is dictated by the size and shape of a standard ceiling tile." (D.I. 150). ClearOne has not yet set forth an argument under 35 U.S.C. § 171 because, as Shure has argued, "claim construction is not the appropriate time for ClearOne to ask the Court to make such a determination." (*Supra* p. 18.)

that the scope of a design patent should be “limited to [ornamental] aspects alone and does not extend to any functional elements of the claimed article.” Neither *Ethicon* nor *Sport Dimension*, both of which cited and discussed *Richardson* approvingly, changed this analysis. In *Sport Dimension*, a district court considered a design patent for a flotation device with three structural elements: two arm bands connected to a torso piece. 820 F.3d at 1318. The district court concluded that the armbands were functional, and eliminated them from its claim construction. *Id.* at 1319-20. The Federal Circuit overturned, finding that the district court erred by “entirely eliminat[ing] a structural element from the claimed ornamental design.” *Id.* at 1321-22. In *Ethicon*, the Federal Circuit simply stated that ornamental aspects of functional portions of a design should be included within claim scope. 796 F.3d at 1334. ClearOne is not asking this Court to ignore ornamental aspects or eliminate a structural element—such as an armband—from the claimed design. Instead, ClearOne is properly requesting that the Court exclude from the scope of the claimed design its purely functional elements.

a) The Thin, Square Shape of the Claimed Design is Purely Functional.

Shure claims that it does not understand what ClearOne means when it references the “thin, square shape.” (*Supra* pp. 51-52.) ClearOne cannot state this more clearly: the overall square shape of the design, shown clearly in Figure 3 of the ’723 Patent, as well as its relative thinness, shown clearly in Figure 5 of the ’723 Patent, are purely functional aspects dictated by the goal of allowing an embodying device to be installed in a standard ceiling grid in place of a standard ceiling tile.

Shure next argues that there are alternatives to the “thin, square shape” of the claimed design, claiming that there are “many alternative designs for ceiling-mountable microphones.” (*Supra* p. 52.) As ClearOne explained in its Responsive Brief, citing *OddzOn*, 122 F.3d 1396, this argument overly generalizes the intended functionality of the claimed design. (*Supra* pp. 35-36.) While there may be many alternative designs for ceiling-mountable microphones, there is only one

shape that allows a ceiling microphone to replace a standard ceiling tile: the shape of a standard ceiling tile. The Sennheiser TC2 illustrates this point, because it has a square shape identical to that of the claimed design, and its profile appears only slightly thicker. Ex. 46 ¶ 28. The numerous prior art 2'x2' ceiling tile speakers/microphones that ClearOne has identified also illustrate this point.¹⁷ (*See Supra* p. 34.) Shure's assertion that these devices do not share a similar "thin" aspect with the claimed design (*see supra* p. 53 (citing Ex. 46 ¶ 31)), is unsupported for two reasons. *First*, the cited declaration simply does not say that. *Second*, the many images of those devices provided by ClearOne's expert show that they *do* share a similar "thin" aspect. Ex. 11 (Hudson Decl.) ¶¶ 26-57; Ex. 10 (Delman Decl.) ¶ 85.

Shure argues that the '723 Patent does not claim measurements or mounting in a ceiling tile. (*Supra* p. 53.) This is irrelevant. The design patent at issue in *OddzOn* did not claim measurements, or any functionality beyond that in the title and claim of the patent of a "tossing ball." Ex. 53. Even so, the *OddzOn* court assumed that the claimed design had a size comparable to a football, and concluded that the functionality of the claimed design was to "be thrown like a football, yet travel farther than a traditional foam football." *OddzOn*, 122 F.3d at 1406. Similarly, the design patent at issue in *Richardson* claimed a "multi-function stud climbing and carpentry tool," and made no reference to a hammer. Ex. 54. Even so, the *Richardson* Court explored its hammering functionality. 597 F.3d at 1294. Courts performing the functionality analysis are not expected to limit themselves to the face of the patent disclosure. To the contrary, the *Berry Sterling* factors expressly require a review of "concomitant utility patents" and whether "advertising touts particular features . . . as having specific utility." *Sport Dimension*, 820 F.3d at 1322. And the '493 Patent—to which the '723 Patent purportedly claims priority—describes and claims both: (1)

¹⁷ Shure's reference to rectangular, 1'x2' ceiling speakers as alternative designs (*supra* pp. 53) is unavailing. Those speakers serve a different function, because they replace only half a standard ceiling tile, instead of replacing a whole standard ceiling tile. The evidence included in Shure's Reply makes clear that this difference is meaningful—when a ceiling speaker replaces only half of a ceiling tile, the installer must then cut and install half of a ceiling tile next to the device, and support it on an additional installed T-Bar. (*Id.*) This is a more difficult installation.

standard ceiling tile measurements; and (2) mounting in a ceiling tile. (*See supra* pp. 37-38.) Finally, Shure does not dispute that its advertising touts the utility of the ceiling-tile shape as allowing easy installation in a standard ceiling grid. (*Supra* pp. 56.)

Shure argues that the '493 Patent discloses other mounting configurations in addition to the ceiling-tile mounting. (*Supra* p. 54-55.) This does not matter. (*See supra* pp. 36-37.) The figures, specification, and claims of the '493 Patent make clear that the thin, square shape of the claimed design was dictated by a desire to allow that design to be mounted in a standard ceiling grid. *See, e.g.*, '493 Patent (Ex. 4) at Fig. 6, 6:8-18, Claims 17, 23-25. The fact that that thin, square design can also be mounted in other ways does not detract from that basic point. *See id.* at Figs. 6-8 (showing different mounting options for the same thin, square design).

Shure notes that the '723 Patent refers only to “an array microphone assembly,” and emphasizes that it is not the “*normal* functionality” of an array microphone assembly to replace a ceiling tile. (*Supra* pp. 54, 55.) But Shure has not provided any support for the idea that the *Berry Sterling* analysis considers only the “*normal*” functionality of the item named in the claim. Once more, *OddzOn* and *Richardson* show the flaw in Shure’s reasoning. The *OddzOn* patent claimed only “[t]he ornamental design for a tossing ball.” Despite the fact that the “*normal*” functionality of a “tossing ball” is not to “be thrown like a football, yet travel farther than a traditional foam football,” that was the functionality that the *OddzOn* court properly ascribed to the claimed design. *OddzOn*, 122 F.3d at 1406.¹⁸ Similarly, regarding *Richardson*, the “*normal*” functionality of a “multi-function stud climbing and carpentry tool” is not hammering, but the *Richardson* court explored that functionality. *Richardson*, 597 F.3d at 1294; *see also* Ex. 54.

For these reasons, the Court should exclude the thin, square shape from the claim scope.

¹⁸ *Shure’s* attempt to distinguish *OddzOn* (*supra* p. 55), is unavailing. In that case, the Court described the functional characteristics of the design patent and found that they “limit[ed] the scope of the protected subject matter.” 122 F.3d at 1406. That is what ClearOne is requesting here.

b) The Extent to Which The Front Face Looks Like an HVAC Vent is Functional.

While discovery into Shure’s design process is not complete, it is clear that the appearance of the front face of Shure’s claimed design was dictated by the functional considerations of: (1) allowing the device to blend invisibly into a ceiling by adopting the form of a known ceiling device; and (2) ensuring that the known form would allow sound to pass to the microphones inside the device. (*Supra* p. 41.) Shure’s Reply does not change this conclusion.

Shure suggests in a footnote, relying on *Automotive Body Parts*, 930 F.3d at 1320, that ClearOne is making an improper “aesthetic functionality argument.” (*Supra* p. 57, n.9). Not so. In that case, a challenger of Ford’s design patents for the hood and headlamps of its F-150 truck attempted to argue that those patents were functional because “they aesthetically match the F-150 truck.” *Id.* at 1319. The Federal Circuit held that “the aesthetic appeal of a design to consumers is inadequate to render that design functional.” *Id.* It continued “[i]f customers prefer the ‘peculiar or distinctive appearance’ of Ford’s designs over that of other designs that perform the same mechanical or utilitarian functions, that is exactly the type of market advantage ‘manifestly contemplate[d] by Congress in the laws authorizing design patents.’” *Id.* (citing *Gorham*, 81 U.S. at 525).

This case is different. While in *Automotive*, Ford had created original designs—among many possible options—that aesthetically matched the rest of Ford’s truck design, Shure created an *unoriginal* design that copied other ceiling-installed devices. Shure did so, not to make its product aesthetically appealing, but to achieve the *functional* purpose—described in its ’493 Utility Patent and touted in its marketing materials—of making its product unobtrusive. See ’493 Patent (Ex. 4) at 1:65-2:3 (discussing “an array microphone that is unobtrusive”), 6:60-7:3 (discussing a desire to “match” the front face of the product to the ceiling tiles); see also Ex. 33 (2016 Shure Article) (“Achieve **Invisible** Audio with the MXA910 Ceiling Array Microphone”; “With the MXA910 Ceiling Array Microphone, Shure figured out how to make a great-sounding AV

conferencing microphone *invisible*.”; “It goes on the ceiling, out of the way and pretty much *out of sight*.”; “[T]he MXA910 is *completely discreet and unassuming*.”) (emphases added).

Shure argues that Shure did not, in fact, model its claimed design after HVAC vents. (*Supra* p. 57, n.9.) To the extent true, this is a distinction without a difference. It has become clear that Shure *did* model its claimed design after pre-existing speaker/microphone prior art, which, in turn, modeled itself after HVAC vents. *See* Ex. 30 at 10:25-31 (patent for ceiling-tile loudspeaker assembly discussing using a preexisting HVAC grille as the front face “to match standard HVAC ceiling diffusers”); *see also* Ex. 11 (Hudson Decl.) ¶ 55 (“A major design consideration for all of these products was making them blend into the décor of the room and the accustomed visual of the ceiling. One way to do that, which we pursued with both the Extron FF 220 Flat Field Speaker and Extron SF 228T Speaker, was to make the device look like air vents that people were already accustomed to seeing in the ceiling.”). Specifically, a Shure-produced document appears to show that the designers of the MXA910 considered [REDACTED]

[REDACTED].¹⁹ *See, e.g.*, Ex. 55 at SHURE362857-59 (Lowell LT2-810-SM810-VL 2’ x 2’ Ceiling Tile Speaker); *id.* at SHURE362868-69 (2’ x 2’ Quam SYSTEM-20 Lay In Ceiling Mount Loudspeaker). Notably, that Shure document identifies the perforated metal front face as providing the *same* functional benefits that ClearOne has identified: [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

Shure argues that the square shape of the perforated grille on the front face of the claimed design is not functional, because “at the four corners of the perforated screen, there are no microphones and thus no functional need for perforations.” (*Supra* p. 58.) This point supports

¹⁹ Shure produced this document in the Illinois matter without metadata aside from its “last modified” date. Decl. of Christina Rayburn in Support of ClearOne’s Claim Construction Sur-Reply ¶ 4. On June 12, 2020, ClearOne asked for further metadata. *Id.* On June 16, Shure indicated that it will produce the metadata shortly. *Id.* As of the time of service of this Sur-Reply, Shure had not provided that information. *Id.*

ClearOne. Even though there was no acoustic need for the perforated grille to be shaped like a large square, Shure chose that shape, because it: (1) matched prior art ceiling tile speakers and HVAC grilles; and (2) enabled the claimed design to blend into the ceiling. Indeed, Shure's '493 Utility Patent specifically claims the large, square nature of that perforated grille. *See* '493 Patent at Claim 17 ("wherein a front face of the housing includes a sound-permeable screen having a size and shape that is substantially similar to the at least one of the plurality of ceiling tiles").

Thus, the Court should exclude from the claim scope the extent to which the claimed design replicates the look of prior art HVAC vents and/or ceiling tile speakers or microphones.

2. Prior Art Must Be Considered in Defining Claim Scope.

In its Responsive Brief, ClearOne included pictures of 12 prior art speaker/microphone devices configured to replace a standard ceiling tile in a standard ceiling grid, and nine prior art HVAC vents, all of which look remarkably similar to the claimed design. ClearOne argued, citing *Lanard Toys Ltd. v. Dolgencorp LLC*, 958 F.3d 1337 (Fed. Cir. 2020), that this prior art should be considered in defining claim scope.

Shure's Reply Brief does not dispute that the speaker/microphone prior art should be considered in defining claim scope. Instead, Shure concedes that these *would* be prior art with which the ordinary observer would have been familiar. (*Supra* p. 58.) Accordingly, the Court should consider this prior art in defining claim scope.

With respect to the HVAC prior art, Shure argues that the ordinary purchaser of the product embodying the claimed design would not be familiar with HVAC vents. (*Id.* at 58-59.) But James Schanz, Shure's Vice President of Global Sales, testified that the MXA910 "looked like an HVAC vent." Ex. 27 at 21:17-20, 103:9-19, 105:10-15. So did Shure's expert on ceiling tiles. Ex. 28 at 143:18-144:11 ("I would not be able to distinguish it from a return air grille."). So did a third-party sales representative in the AV industry. Ex. 29 at 49:6-7. If these individuals, of various backgrounds unrelated to the HVAC industry, are nevertheless familiar with the appearance of HVAC vents, there is no reason why the ordinary observer would not be. To the contrary, the

ordinary purchaser of a ceiling-installed audio device would likely be familiar with other objects that are commonly packaged in ceilings. Accordingly, this prior art should be considered as well.²⁰

3. The '723 Patent Is Indefinite And Not Enabled Because Neither A POSITA Nor An Ordinary Observer Would Understand Whether The Claimed Design Includes 16 Open Slots.

As set forth in ClearOne's Responsive Brief, because Figure 2 of the '723 Patent claims 16 slots in a prominent, symmetrical pattern around the back panel of the device, while Figure 4 claims the same back panel without those slots and with continuous perimeter edges, the '723 Patent is indefinite. (*Supra* pp. 25-31.) Shure argues, in response, that the slots are not material features of the design, such that the differences between Figures 2 and 4 would not preclude an overall understanding of the design. (*Supra* p. 59-62.) The testimony of Shure's own expert witness contradicts Shure's argument.

Shure's expert witness testified at deposition that the 16 slots—which appear to be claimed in Figure 2 and not claimed in Figure 4—are *16 individual features*. Ex. 57 at 279:8-17. He admitted that those *16* inconsistencies between Figure 2 and Figure 4 appear on the back panel of the claimed design, which claims very few additional features:

Q. Other than the side walls of the back panel, the notches and the perimeter of the back panel, is there anything else claimed on the back panel?

A. Other than those three elements, we see a lot of unclaimed matter but no other claimed matter.

Id. at 241:13-16. Confirming this point, his declaration, at Table 1, annotates the features of the claimed design, including the 16 slots. Ex. 46 at Table 1. That table shows the slots to be a

²⁰ Shure argues that the advertising photographs of diffusers included in Mr. Hudson's expert report are unreliable, based on Mr. Hudson's testimony that they may have been backlit, frontlit, or Photoshopped to enhance the visibility of interior elements of the depicted products. (*Supra* p. 59, *citing* Ex. 47 at 103:1-104:23.) This concern is irrelevant. Several of the photographs do *not* show interior elements, meaning that this testimony does not apply. And for the others, Mr. Hudson testified clearly what the potential alteration was: "it's in my experience that when you have the original—when you obtain the product, you only see perforations as perforations." Ex. 47 at 103:6-17. Regardless, the photographs themselves constitute prior art. 35 U.S.C. § 102.

material feature relative to the other annotated features. *Id.* Finally, he testified that, despite being an expert witness with ample time to review the '723 Patent, he *still* cannot take a position on whether those slots are claimed in the '723 Patent. *Id.* at 239:8-15. Based on Shure's expert's testimony alone, it is clear that the differences between Figures 2 and 4 preclude the overall understanding of the design as a whole.

There can be no question that the 16 slots are material to the overall design. The '723 Patent has six figures: two represent the front of the device (Figs. 1 and 3), two represent the back of the device (Figs. 2 and 4), and two represent identical claimed side views (Figs. 5 and 6). The presence or absence of 16 slots thus impacts two of the six figures of the claimed design. And they are significant features where present. Ex. 10 (Delman Decl.) ¶¶ 65-68, 72-75. They are shown in Figure 2 as being located in a symmetrical, patterned manner on the perimeter of the large square back plate²¹ of the claimed design, and they are the most distinctive aspect of the back of the claimed design,²² which is otherwise made up of a series of squares. *Id.* ¶¶ 67-68, 73; *see also* '723 Patent at Fig. 4; *OddzOn*, 122 F.3d 1396, 1405 (what matters is the "overall ornamental visual impression"); *Cornucopia*, 2012 WL 3094955 at *7 ("The look of a cylinder is not arbitrary or decorative; it is the look of operation."). This is *especially* so if functional aspects are excluded from the claimed design.

Shure's attempts to distinguish *Spanx* and *Masonite* are unavailing. In both those cases, the identified discrepancies were material in view of the relative complexity of the design. The

²¹ Shure accuses Mr. Delman of being confused as to the location of the slots, but it is Shure who is confused. The slots *are* located on the perimeter of the back panel. *See, e.g.*, '723 Patent at Fig. 2. The illustrations of Shure's own expert demonstrate this. (Ex. 46 at Table 1.)

²² Shure's suggestion that the back of the device is less important than other sides of the device (*see supra* p. 63), is contrary to law. *See Tristar Prods., Inc. v. E Mishan & Sons, Inc.*, Civil No. 17-1204 (RMB/JS), 2017 WL 1404315, at *3 (D.N.J. Apr. 19, 2017) (criticizing plaintiff for not comparing the bottoms of cooking pan designs because "[a] proper design patent infringement analysis requires that all of the ornamental features illustrated in the figures be considered") (emphasis in original); *Contessa*, 282 F.3d at 1380 ("[F]or purposes of design patent infringement, . . . the comparison must extend to all ornamental features visible during normal use of the product, i.e., beginning after completion of manufacture or assembly and ending with the ultimate destruction, loss, or disappearance of the article.") (internal quotations and citations omitted).

same is true here. Shure’s claimed design—and particularly the back side of that design where the 16 discrepancies appear—is relatively simple and non-ornamental, and certainly less ornamental than that in *Masonite*. Ex. 10 (Delman Decl.) ¶¶ 65-68, 72-75. The 16 identified discrepancies are material in view of that simplicity. *Id.* ¶¶ 65-68, 72-75; *see also* Ex. 46 at Table 1.

The *Deckers* court’s treatment of U.S. Design Patent No. D582,650 does not suggest a different result. In that patent, one embodiment was depicted by 14 figures, only one of which appeared, in an obscured view, to be inconsistent. *Deckers*, 2016 WL 7017219, *5 (“Fig. 6 appears to depict hatch drawings on the top lip of the boot that do not appear in the other drawings”); *see also* Ex. 58 at Figs. 1-14. In other words, for that patent, it was clear which figure contained the error. The same is not true here.

Weber is similarly distinguishable. In that case, the only inconsistency that the Court found was that “figures 4 and 5 depict a narrow band along the bottom of the grill cart while figure 1, in the corresponding location, does not.” 2015 WL 9304343, *18. That inconsistency was a very minor detail in view of the many “eye-catching” ornamental aspects of the claimed design, including “the handle for the grill lid; the symmetrical end tables; and the shapes and relative proportions of the end tables, grill cart, and shroud.” *Id.* at *15. The ’723 Patent is far simpler, and has inconsistencies that are far more prominent and greater in number, than the patent at issue in *Weber*.

Finally, *Asano* is like *Weber*. The design patent at issue in that case had hundreds of features that were entirely ornamental, and the identified discrepancies were not material in light of that. *Asano*, 201 U.S.P.Q. 315. Indeed, the Patent Board did not even make a conclusive determination of “*if [those discrepancies] exist.*” *Id.* (emphasis added). Here, there is no dispute that there are 16 irreconcilable inconsistencies in the figures of the ’723 Patent.

In conclusion, the ’723 Patent is far more comparable to *Times Three* and *Masonite* than it is to the cases Shure cites, and it should be held indefinite and not enabled.

V. CONCLUSION

A. Plaintiffs' Opening Position

Shure respectfully requests that the Court construe the Claimed Design of the '723 Patent by adopting Shure's proposed construction as outlined above.

B. Defendants' Responsive Position

For the reasons discussed above, the following claim constructions are appropriate:

- (1) the '723 Patent is indefinite and not enabled;
- (2) if the '723 Patent claim can be construed, the thin, square shape of the design is purely functional and not part of the claimed scope of the '723 Patent;
- (3) if the '723 Patent claim can be construed, the extent to which it looks like prior art ceiling vents is purely functional and not part of the claim scope; and
- (4) the '723 Patent is directed to part of the housing, not the entire product as sold.

Additionally, the Court's construction should include a description of relevant prior art, including lay-in ceiling tile speakers and ceiling air vents, to properly limit claim scope.

C. Plaintiffs' Reply Position

Shure respectfully requests that the Court construe the claimed design of the '723 Patent by adopting Shure's proposed construction as outlined above and in Shure's Opening Claim Construction Brief.

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McCARTER & ENGLISH, LLP

/s/ Brian R. Lemon

Michael P. Kelly (#2295)
Brian R. Lemon (#4730)
Alexandra M. Joyce (#6423)
405 N. King St., 8th Floor
Wilmington, DE 19801
(302) 984-6300
mkelly@mccarter.com
blemon@mccarter.com
ajoyce@mccarter.com

Gerald F. Ivey
Mareesa A. Frederick
Elizabeth D. Ferrill
FINNEGAN, HENDERSON, FARABOW,
GARRETT & DUNNER, LLP
901 New York Avenue, N.W.
Washington, D.C. 20001-4413
(202) 408-4000

Elliot C. Cook
Joseph M. Schaffner
Alexander M. Boyer
FINNEGAN, HENDERSON, FARABOW,
GARRETT & DUNNER, LLP
Two Freedom Square
11955 Freedom Drive
Reston, VA 20190-5675
(571) 203-2700

Attorneys for Plaintiffs

MORRIS, NICHOLS, ARSHT & TUNNEL LLP

/s/ Michael J. Flynn

Michael J. Flynn (#5333)
1201 North Market Street
Wilmington, DE 19899
(302) 658-9200
mflynn@mnat.com

John C. Hueston
Douglas J. Dixon
Christina V. Rayburn
Sourabh Mishra
HUESTON HENNIGAN LLP
620 Newport Center Drive, Ste. 1300
Newport Beach, CA 92660
(949) 226-6741

Attorneys for Defendant ClearOne, Inc.